

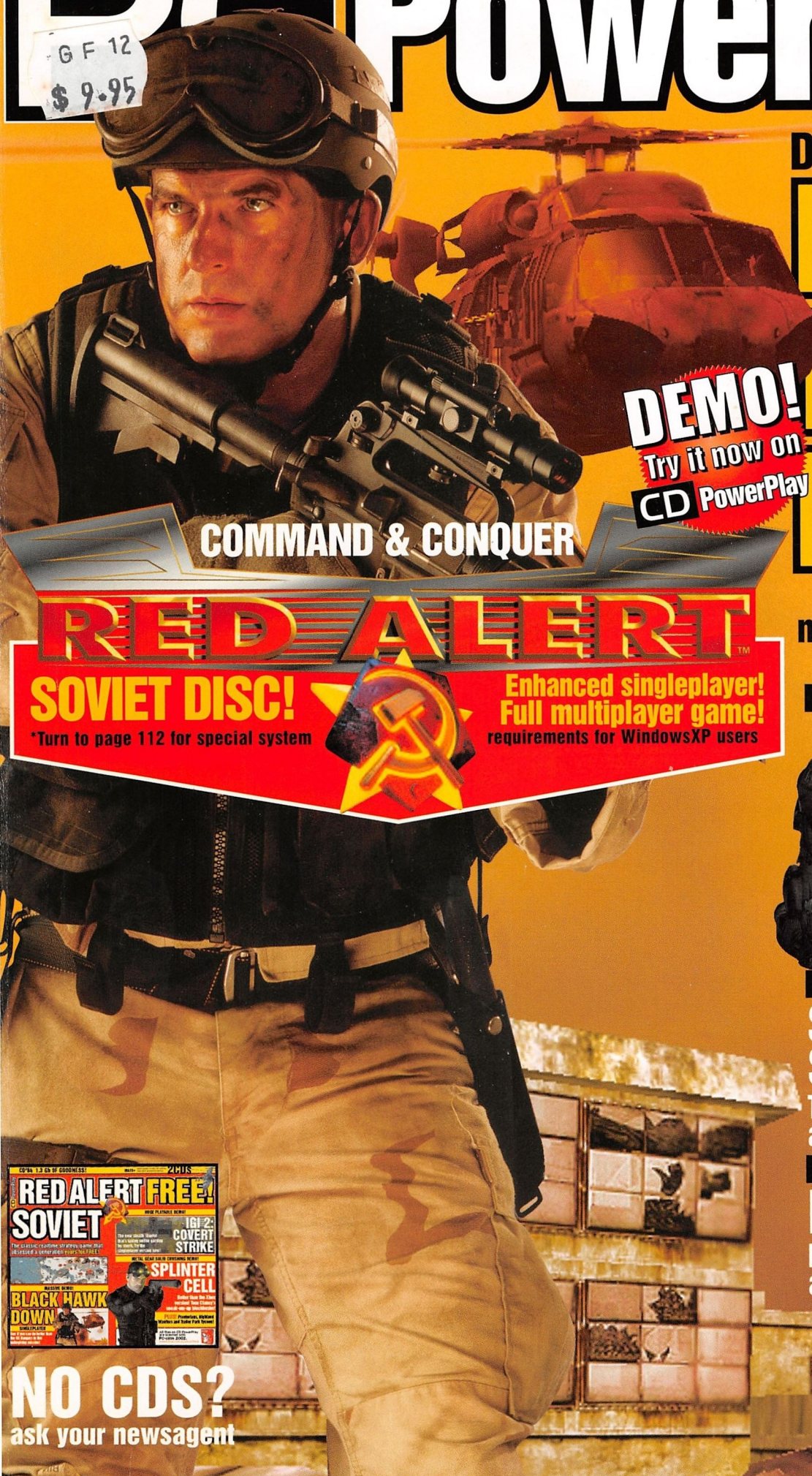
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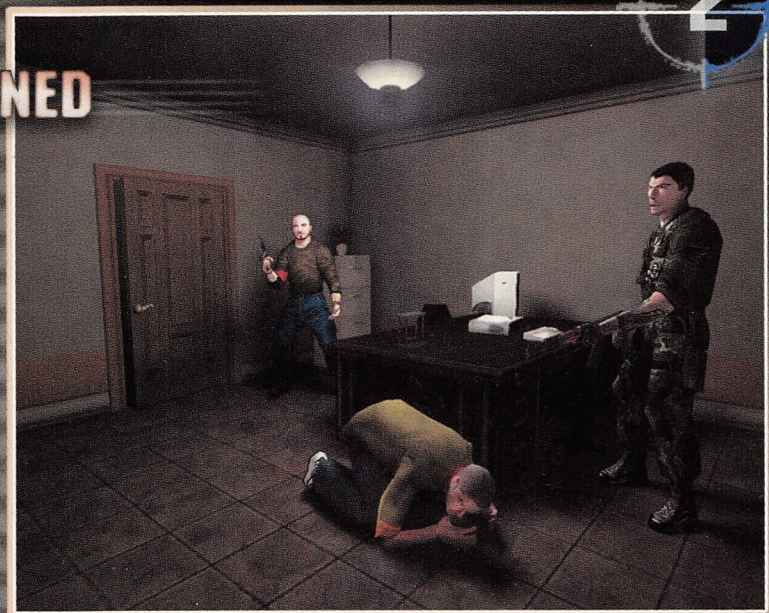


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Something happened over Christmas that has never happened before. Something that disturbed everyone associated with this magazine very deeply. In the November-December period chart-keepers Inform, for the first time ever, reported that the PlayStation2 lead the PC by 8% in total market share.

Until now the PC has dominated gaming. It

enjoyed excellent growth each month, with more people buying more games (even if most of those games were a copy of the Sims), ensuring that our lead over the consoles could never be challenged.

But 2002 saw the release of three new games platforms - Microsoft's Xbox and Nintendo's Gamecube and Gameboy Advance - into a market that was suddenly saturated. New gamers were bombarded with console advertising from every direction, on buses, billboards, dangling from helicopters at the beach, and if Microsoft had owned a laser capable of painting messages on the moon, they sure as hell would have done it.

Christmas Horror

Over Christmas this all came to ahead. The Xbox - struggling slightly against the installed base of the PSX and the new adopters of the PS2 - was re-released in a special pack that included a DVD remote and three very good games. It sold like hotcakes, allowing Microsoft to report a 220,000+ sell-through in its first 10 months.

So what? you might think. Let the console have their fun. We'll stick with the PC and enjoy superior games on a superior platform. True, thanks to the Radeon 9700 and recent announcement of the GeForceFX, in addition to new memory standards and new CPUs from Intel and AMD, the PC is now considerably more powerful than its nearest gaming rival, the Xbox. But superior games? We're no longer so confident.

While much of console's new success can be attributed to the release of PS2 and Xbox and their targeting of mature gamers (not just younger children as Nintendo seems to do) and stealing potential PC gamers before they discover our platform, the PC gaming industry has to take some of the blame itself. We took a glance over the last few months and realised the vast majority of our games, and certainly the major releases, are all sequels, remakes or tiny re-jigs of games we've already played.

Think about it: Doom 3, Unreal 2, Rome: Total War, C&C Generals, Deus Ex 2, Sim City 4, Raven Shield, Championship Manager 4, Dragon's Lair 3D, IGI 2 - the list of PC's big 2003 titles reads like a eulogy to original thought. Everything major is some kind of sequel or remake, and the fresh new concepts are left to fringe studios with unproven track records, like Demis Hassabis' Elixir (he talks about his game Republic on p50).

The Bloat

But who can blame them? The industry is so bloated with middle-management that games cost ridiculous amounts of money to make, so publishers are terrified of not making a profit, despite the fact that its THEIR over-staffed offices that push up the overheads. And new developers with fresh ideas that really seem profitable are immediately snapped up by Xbox evangelists, turning PC's great new hope into little more than a six-month old Xbox port.

PC is still trying to do things the old way. A few, well-established studios making sure-things hits. Everyone wants to be the Sims. In fact, the nature of PC development now is such that for it even to be worthwhile, everyone HAS to be the Sims. Or Warcraft 3. Or Age of Mythology.

All this is in turn compounded by the nature of our platform, which is such that a gamer can't even be confident that any given game will even run on their machine. And if it does run, badly, improving its performance involves the kind of high-level tinkering that would make even an experienced mechanic suck at his teeth.

It means that while in the console section of a games store people are fighting each other for the last six copies of GTA3: Vice City, over at the PC shelf there are a bunch of worried looking folks reading the tiny small print on the bottom of boxes to see if their 9-month old, \$3500 system can actually run EA's latest monopolising blockbuster.

Ray of Hope

But it's not all doom and gloom. There are hundreds, even thousands of developers out there in the big wide world, feverishly working away at the next great thing, hoping against hope that their publisher doesn't demand their vision be perverted out of all recognition because their design document isn't enough like Warcraft. And there are millions more gamers who want complex tasks, high-resolution graphics, advanced physics models, big storylines, hundreds of items and dozens of NPCs in their games. There are people who want a second life online where they are the lord and master of a medieval fiefdom, where they dominate the spaceways with 5000 other simultaneous players, and where they can watch tournaments played by actual professionals who earn hundreds of thousands of dollars for their trophies.

PC gaming is in a trough right now, it can't be denied. But instead of a death-knell, let's just make sure this is just the bottom of a natural cycle. Realise your console is just for play, and the serious business of gaming needs to be done on PC. Support developers by taking a chance on games you may not have heard that much about (except in the pages of this magazine, of course). Don't buy the big sequels, or at least for each sequel you pick up, make sure you grab a couple of original titles from the bargain bins as well.

The Plan

We can't just blame the developers or the publishers. We have to change our own buying habits. We have to become PC fundamentalists. We have to shout out to the world that PC is the only gaming platform worth dedicating our waking hours to. Everyone should be like Robert Laus (see our EQ: Planes of Power review PCPP#82) and spend 48 consecutive hours playing online games! Uh... actually maybe I went a bit far on that last one. In any case, we have to do all this because PC, unlike the consoles, doesn't have a central company with a massive marketing budget to do it for us. Consoles can build their own gaming cultures. We have to build ours. It's harder work, but it makes us superior.

Just be loyal to your PC. It's served you well all these years. And if we don't lose heart, we may just find that the best is yet to come.

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Already OzForces has a large, constantly growing network of public "Game Server Rental" options. Australia's first "Game Server Rental" options. OzForces realises that gamers do not live by servers alone and so have a well established network of "OzSites" covering all aspects of the gaming culture (www.ozgn.com). This network is tied to the bulletin board or forum system called ozforums.com where 15,000 registered members post news, chat and make friends everyday.

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INBOX



LETTER OF THE MONTH: Says hype kills!

I was reading through issue 81 of your mag a few weeks ago and noticed the new FPS Ironstorm featured in the reviews, editorial, charts, DVD and CD pages. Evidently, there was quite a bit of hype towards the game with stuff like "run out and buy your full version copy of Ironstorm IMMEDIATELY." and an extremely glowing review of Ironstorm. So naturally, I installed the demo of Ironstorm after reading and played it for about 30 minutes. My thoughts on the game after playing weren't too exciting or positive even though I did identify all the great aspects of it. I think the reason for that was all the hype I took in earlier, which raised my expectations and made

me expect too many details that weren't there. With that in mind, almost any title can be influenced by hype, Deus Ex for example. If you told a guy that Deus Ex received 'Game of the Year' enthusiastically before having him play it, of course his opinion would be different if you had said nothing. The guy's expectation would rise by hearing 'Game of the Year'. I'm not saying that you guys shouldn't give your personal opinions or award GOTYs, nor am I demanding less hype, I'm just trying to make a point: hype can be a bad thing, and people should think about the effects of hyping up games.

Maybe Ironstorm popped out of nowhere so it could avoid any potential hype.

Edward Hun

And I guess our review

and coverage kind of ruined that then huh? I think your point is quite valid indeed Ed (do you mind if I call you Ed, Ed) and perhaps, with hindsight, and less zealous appreciation of Ironstorm might have prevented the storm of controversy that followed the review. Still, I think it's a hell of a lot more coverage than the game might otherwise have received, given that the poor thing seems to be languishing on the bottom shelf down at EB. But I still wonder why games that have been pre-hyped, as it were, by big distributors like Microsoft and EA seem to be forgiven their shortcomings (they certainly sell, after all) while a more original game like Ironstorm gets passed over by the buying public. Sigh. Back to Tenebrae Quake for me!



Since Edward was so deeply traumatised by the disparity between the expectation and the reality of Ironstorm, he wins a copy of The Thing which will hopefully make him feel a lot better. Or at least scare the willies out of him, which is the next best thing.



Don't believe the Hype!

My sister has a thing for your esteemed editor, Mr Anthony Fordham, lol, she thinks he has 'pretty eyes' bwahha!

Mr:Mendeego

It's comments like this that really make this job worthwhile. Sigh.

Failed to spot piracy

I am overseas in China right now, and the games here are really cheap, and I don't mean pirated ones. Legal games over here are around \$10. I bought Delta Force TFD for \$5 Aussie, and UT2003,

Neverwinter Nights and Warcraft 3 each for \$20, do they make them out of slave labour or something?

The most expensive game I found was the Diablo 2 collector's edition, selling for \$60 Aussie. Each game comes with box, warranty card, silver CDs, manual (in Chinese, too bad I can't understand them) and real CD key that works online! And I even got a WCG membership card (again, I think it only works in China, too bad huh?) along with my UT2003. So why are Aussie games so overpriced? why do they sell them at \$80-\$90 when China can sell them at a marked price of \$20? I have to go across the street to buy more games now, I think they have CS in stock for \$5.

Jack

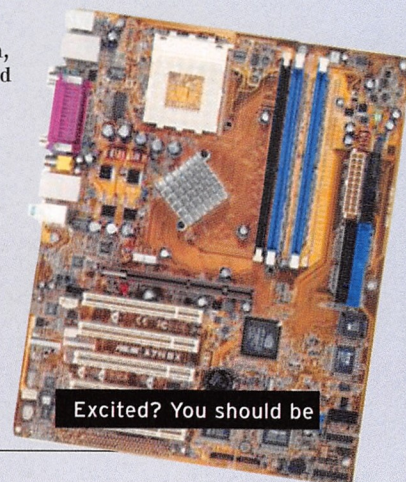
Okay Jack, you've just discovered there is piracy (Warez downloaded from the Net, complicated .isos and clever repackaging of files to reduce overall size) and then there is piracy - legitimate shops selling games with printed boxes, CDs, manuals, warranty cards, the whole bit. As genuine as they may appear, these are indeed dodgy copies, CD codes and all. The real 'cost' of piracy doesn't come from Joe Downloader and his Optus cable connection, it comes from organised groups selling seemingly legit products in markets where the watchdog is too fat, asleep, or even dead. I bet you could also get Microsoft Office XP for like, \$50 right? While here in Australia it's a \$1200 software package. That's not to say our software prices aren't grotesquely

inflated - the GBA has it the worst: \$70 for a game you played four years ago on the SNES? Bastards!

Thinks we're mad

I just read your review of the Asus A7N8X Motherboard. You note that it uses dual channel DDR ... for the unenlightened this is like RAID 0 (I'll simplify things a bit) for memory. Now RAID needs more than one hard disk, much like dual channel DDR needs two sticks. I read the review and checked 3 times, it only states that it uses 256MB of Corsair XMS3200. Either you used two 128MB sticks, or Asher mucked up really bad. Also to note is the fact that you test the nforce with a 2200+. Testing with a 333mhz processor would make more sense, as not much more data can be squeezed through the 266mhz bus then already is. The last point is the fact that you don't mention what speed you ran the memory at. It is a well known fact that nForces run best with the memory in sync, so if you ran the memory at 400mhz on a 266mhz processor there is your third mistake. I honestly hope that you didn't make the 1st and 3rd point mistakes, it really would be quite embarrassing.

Alex Davies

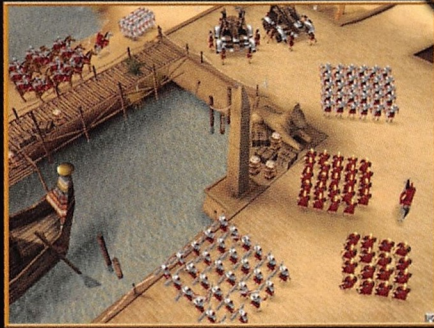


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SPECIAL REPLY FROM ASHER MOSES:

In regards to your first query, we did in fact use two 256MB Corsair XMS3200 modules during testing. As for your second point, we were only able to test the board with a 2200+, due to the fact that at the time of writing, the 333MHz FSB processors were relatively new and we unfortunately did not have access to one at the time. That said, even if we were to use a 333MHz FSB processor on both boards during testing, the performance difference is likely to be the same due to the fact that the FSB bottleneck would remain constant. This is also the case when running the memory synchronously, as running the processor at a 400MHz FSB (identical to the memory) would require much tinkering of the FSB and multiplier, which everyone besides advanced users would have much difficulty doing. Similarly, clocking the memory down to the same speed of the processor's FSB (266MHz) would leave the same FSB bottleneck seen previously as the CPU would still only be able to process 2.1GB/sec.

Loves the world

I often read letters in your mag about how cruel and harsh some players can be in online games, particularly to newbies. Accused, Abused and then Booted. I want to share an experience I had. After continous bot matches, tried playing Jedi Knight 2 online. So I found myself in a server, a newbie with a ping at least twice that of every other player. I was wondering how long this game would last. I was pleasantly surprised. The other players did not boot me, answered every stupid question I had, and although they had a bit of a laugh at my continuous lack of frags, it was good-natured. Maybe different games attract

different sorts, but it was fun, friendly and everything online gaming should be

Talkron

Well that's heartening news Talkron, reminds me of the glory days of Quake 1 Shareware, where we'd frag each other for about fifteen minutes and then settle down to a good old natter, utilising id's fine client-server structure as a visual IRC zone. Where did it all go wrong? Who can we blame? Alas, as mentioned in previous issues, we can only ever really blame ourselves.

Creeped out by PC store

Not long ago my fan starting making some very unhealthy buzzing noises - now I didn't have that much money to spend on repairs so I took my beloved baby to a less-than reputable company called Fans Computers. I had heard some rumours about this company from friends so prior to taking it in I installed a security program that logs all activity, including file transfers, keystrokes etc.. so I would know EXACTLY what these guys were doing with my computer. Well, when I got it back I immediately checked the logs. WOW. Not only had they examined the contents of my hard drive thoroughly, but they had copied many personal files including resumes, address books, phone numbers, games and my esteemed and almost endless collection of pr0n! I felt like murdering these guys! I was going to ring them and start the accusations but I figured I would get your advice first. Now I've got them by the balls, red handed so what are my options here?

x|tidemark

Actually I can just imagine their reaction: "We have a duty to check all PCs we handle for illegal materials such as virus making

programs, state secrets and child pornography." Actually it would be interesting to find out if anyone's ever legally tested the "we are not responsible for the integrity of your data" clause in almost every PC store's repair policy, to see if 'not responsible' runs as far as allowing them to meddle with your personal private stuff. It's a little like hiring a guy to paint your house and then finding out he's gone through all your underwear drawers. Computers Fans should have only fiddled with your



A typical systems integrator

fan and maybe booted the machine once or twice to see if the buzzing noise had

stopped. I'd march straight back in there and demand to know why they even looked at your files. Perhaps you could take a family solicitor with you? On the other hand, if they haven't actually done any damage it might be all just a big waste of time, so at the end of the day I recommend doing the great Australian thing: don't complain, just never ever go back to that store again.

FROM THE FORUMS: Eminem in Deus Ex movie?

Just when you thought too much speculation was barely enough, the usual suspects on the PCPP Forums went completely mad, jumped to wild and crazy conclusions and decided the evidence pointed to Eminem being slated to appear as J C Denton in Deus Ex: The Movie. How could this happen? Read on.

www.pcppowerplay.com.au/forums

Posted: Jan/05/2003 10:59 am
EMINEM'S NEXT MOVIE! DEUS EX? The SUNDAY TELEGRAPH newspaper had a very small article in the entertainment section at the back... I will write this article as it is: "Despite vowing never to act again after his first movie 8 Mile, Eminem is in talks to star in a second film. A spokesperson for Columbia Tri-Star confirmed the rumour saying the film is about 'a twin brother and a secret agent'". -N3XT, Monkey

Posted: Jan/05/2003 2:07 pm
Oh Jesus Christ, I just checked who had the rights for Deus Ex movie. And it's Columbia Tri-Star. Quote: "Columbia Pictures has optioned the rights to develop a science-fiction action-adventure franchise based on the award-winning PC game Deus Ex, it was announced today by Peter Schlessel, President of Production for Columbia. The project will be developed and produced by Laura Ziskin, who most recently produced Spider-Man for the studio." Hip hop Masta Bomb Aug anyone? Arach, Jedi

Posted: Jan/05/2003 2:43 pm
WTF! Eminem as J C Denton?

Pfft... they're probably better off just video taping someone playing the game Daedelus,Grunt

Posted: Jan/05/2003 3:51 pm
Why are you guys assuming he will play JC? In most cases he will probably play JC's bro, or some other insignificant role. Maybe the bad guy? And IMO, I think VIN DIESEL would make a kick-arse JC, once the make-up and the cyborb looking crap is on his face
Ingram, Monkey

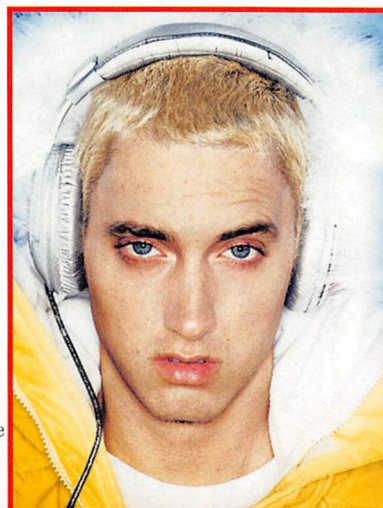
Posted: Jan/06/2003 11:03 am
Eminem has been getting rave reviews for 8 Mile. Perhaps the guy can act? Of course, acting your life story is a bit different to acting a completely different role, so it's not to say he'd be any good. But Vin Diesel?
I just don't think he could pull it off - he always plays Vin Diesel, just like Arnie always plays Arnie. JC Denton is a more complex character. Can you imagine the scene? "Hey Bro! Stop thinking conspiracy and start thinking Playstation, man!" *dies*
krazzkrok, Templar

Posted: Jan/07/2003 2:19 am
But Eminem don't have black hair!
soa_marine, Tiefeling

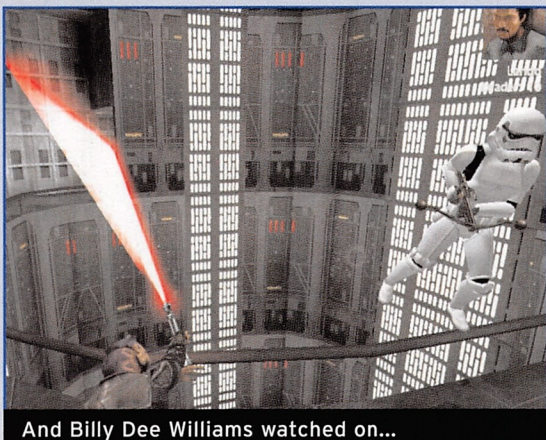
Posted: Jan/08/2003 11:07 pm
Just to show how horribly cliched and poor the story line of Deus Ex is,

we get a comment on Eminem making a movie "about a twin brother" and you guys think Deus Ex? Wow, a Twin Brother and a secret agent, like that isn't one of the most overused plot elements ever. Let me see Van Damme did it at least twice, Jackie Chan has done it with Twin Dragons, Chris Rock and Anthony Hopkins in Bad Company, Jet Li used it to an extreme with The One. Sitting Duck, MIB

Posted: Jan/10/2003 2:30 am
I doubt they'd hire Eminem for a minor roll and I can't imagine him playing a geek like Alex. Maybe a terrorist leader or some such? Apparently he isn't that bad an actor. But just think, Deus Ex The Soundtrack! Featuring the vocal talent ... um, erm ... vocals of Eminem! Bah, his music isn't that bad, its just not my piece of cake.
Eloemosynator, Tiefeling



Apparently Boy George thinks he's gay. Can't imagine why.



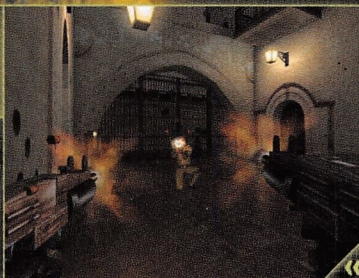
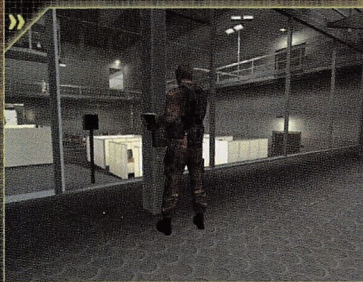
And Billy Dee Williams watched on...

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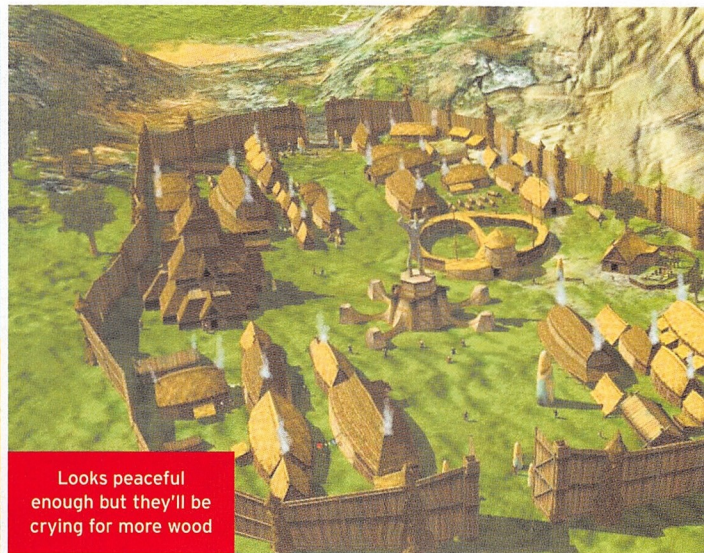
GENIUS AT PLAY™

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Black & White 2

Developer: Lionhead Studios ■ Publisher: Electronic Arts ■ Distributor: Electronic Arts ■ Due: Q4 2003

Molyneux gives it another shot



Looks peaceful enough but they'll be crying for more wood

The original Black & White (B&W) although an extraordinary achievement in AI lacked a level of playability that could have made it a classic. In the end it became a convoluted task of micro-managing villagers, attending to a recalcitrant creature and if you made it to the final mission before the first patch was released, the rude discovery that the game was unfinished.

Five to a series

Although it would seem a little premature given the problems with B&W, Peter Molyneux has quite ambitious plans for the series. Five games in total are his goal and each B&W will represent a progression of culture and technology.

The original was set in the times of primitive man where every clap of thunder was a message from Thor. Part 2 sees the introduction of swords, armour and bows and consequently war which you must either encourage

or stop. Part 3 is about a tribe from B&W 2 that believes in no god (that's all the info so far) and the story behind part 4 is that rather than just believing in a god, people need something more concrete to believe in, some task or great cause you direct them in. The fifth and final instalment in the series features a striving technological metropolis. With technology the people no longer have a use for gods and you have to change their mind.

War is good for business

Says Peter Molyneux, "Having the opportunity to take out the mistakes that we made in B&W is fantastic. Basically the gameplay concept is this: You come back in B&W 2 and the world is at war. Whether you're the sort of god that promotes this war, encourages it and makes sure the world is even more at war, or whether you're the sort of god that despises war and discourages it is where the choice comes in".

An element of warfare and conquest should make B&W 2 a more satisfying experience but there are also a number of other new additions. First up is that you will be able to create walls around villages and cities to protect them from marauding armies and enemy creatures. Walls will be interesting in that they're grown by you as a deity but the longer you allow the wall to grow the thicker and higher it gets becoming more unstable and more damaging if it comes crashing down.

Epic battles

B&W2 is also promising epic battles in the style of Medieval: Total War. The number of villages that can exist in the world has been quadrupled and thousands of NPCs can now battle it out. Of course your creature will once again be called to duty in an effort to defend your villagers from advancing armies. This should be amazing because enemy armies will react differently based on the strength of your creature. If it is too weak they will climb all over the creature and subdue it like in a scene from Gulliver's Travels. If the creature is strong they will rally back and fire arrows making your creature look like an overgrown pin cushion. To assist your Godzilla-sized pet from these attacks new miracles and technology will allow you to power up your creature with different armour, weapons and abilities to stop wars or start new ones.

Populous additives

A welcome consideration on the part of Mr Molyneux is that he's returning to a tried and true combat methodology used from his original masterpiece Populous. A new unit called the disciple leader will act like the Knight from the eighties classic. Knights used to travel from village to village and collect armies which can be used for combat and this is the same in B&W 2 except that you use disciple leaders instead. Keeping in line with the "you influence" rather than "you control" design, you direct

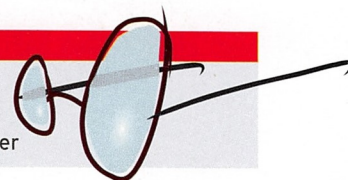
Why Black and White 2 deserves a second look

Warfare and conquest!
Violence means
more gameplay

Less Micromanagement

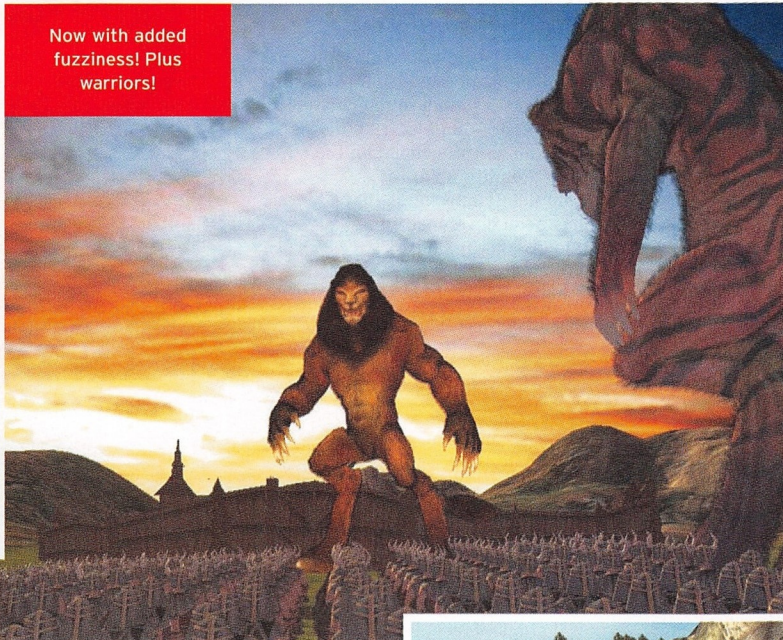
Refined good & evil AI
makes for more role-
playing!

Two separate teams.
One for Singleplayer,
the other for Multiplayer



FREELANCER

Now with added fuzziness! Plus warriors!



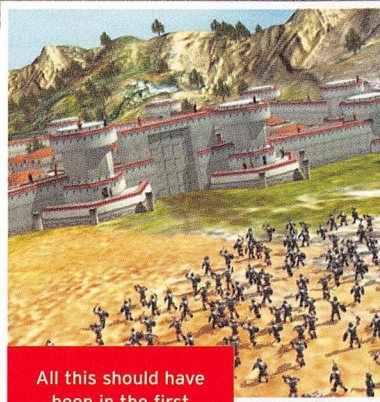
disciple leaders where to go and their armies will follow. The advantage is that you will only have to control a handful of units when battle heats up.

Good, Evil and Graphics

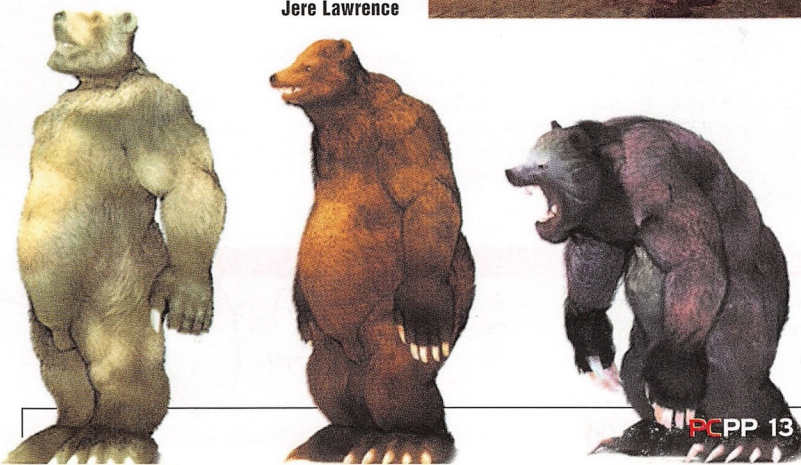
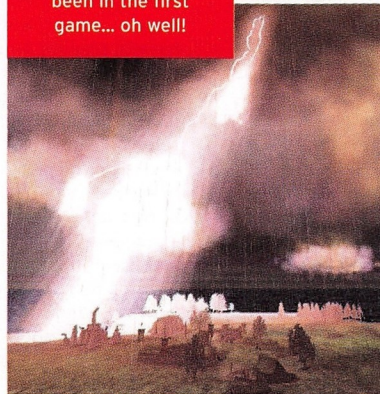
B&W 2 will feature significant graphical upgrades over its predecessor and should be very visually impressive. One particularly nice addition is that you will be constantly reminded which direction you're going and the world will reflect your good or evil nature. If you're good, cute little bunny rabbits will joyfully hop around the landscape or if you're evil horrible orc-like creatures will feature instead. Other niceties include vector-shaded fur effects (can be seen on the tiger screenshot) and arrows that will stick out of your creature along with pain skins that show how injured it is.

Molyneux is literally a god in the industry and his rational, honest acceptance of the failings of B&W inspires a lot of hope for B&W 2. Now with added epic battles, it's going to feel good unleashing your buffed-up uber-creature to get all medieval on an invading army.

Jere Lawrence



All this should have been in the first game... oh well!



PCPP 13

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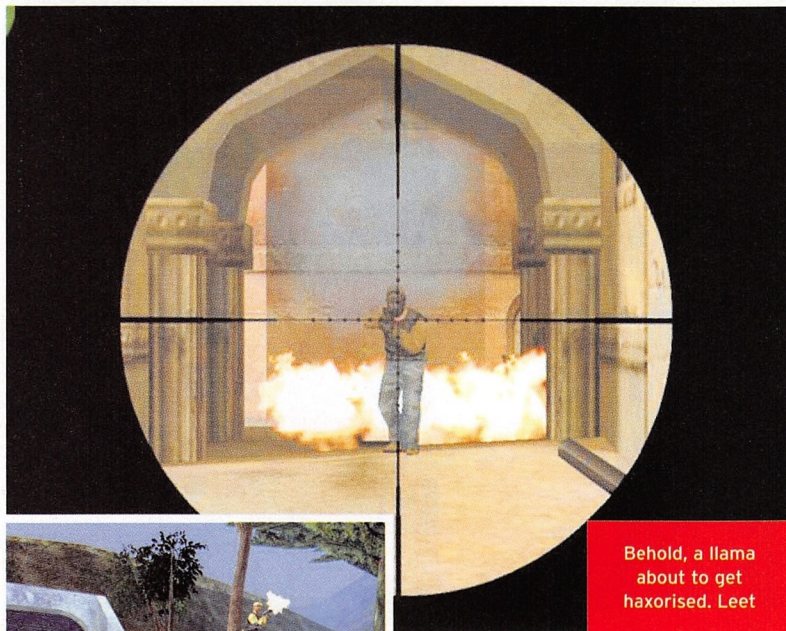
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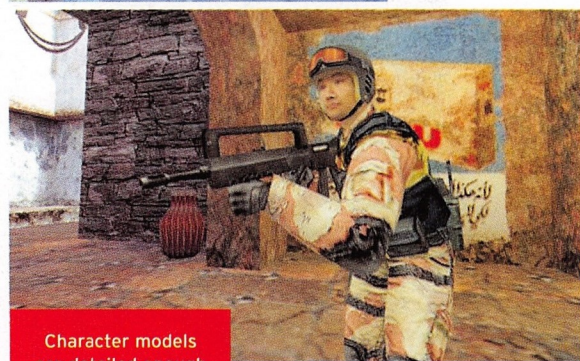
Counter-Strike: Condition Zero

Developer: Ritual ■ Publisher: Sierra ■ Distributor: Vivendi ■ Due: May 2003

At last! (runs around in circle looking at floor)



One of the most talked about games currently in development, Counter-Strike: Condition Zero, will soon be upon us, and boy does it look promising. Why? Well, for starters it's the singleplayer conversion of the most popular multiplayer-enabled first person shooter ever created. This is even more impressive when you take into account the fact that the game started out as an amateur Half-Life mod created as a hobby by two guys in the USA, who later went on to work full-time for Half-Life developers Valve.



Character models are detailed enough to show ethnicity



Not just a sequel

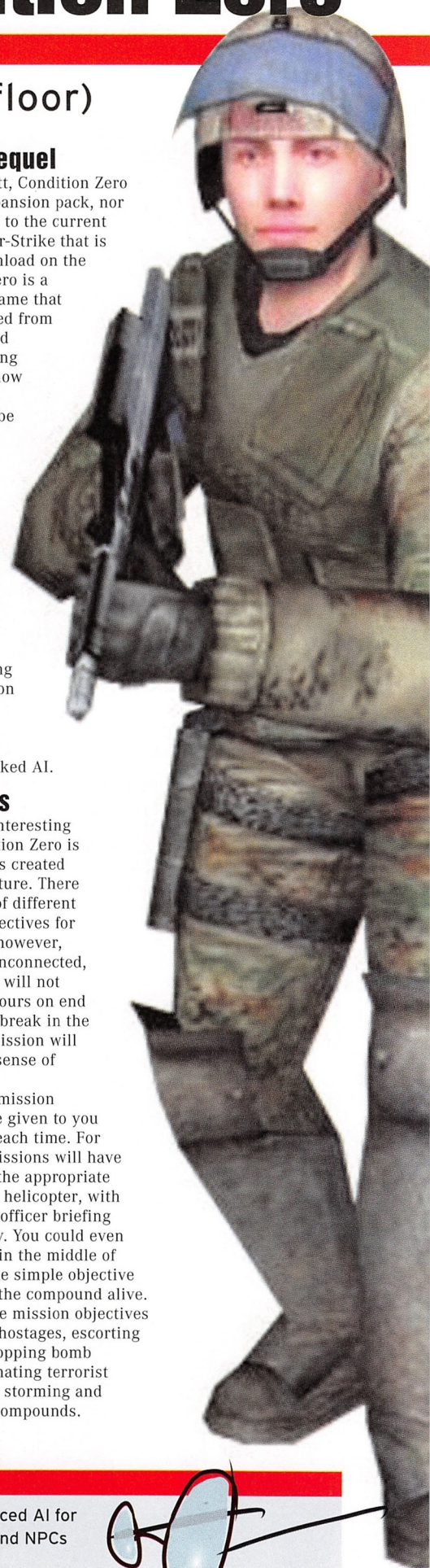
Despite scuttlebutt, Condition Zero will not be an expansion pack, nor will it be a sequel to the current version of Counter-Strike that is available for download on the web. Condition Zero is a completely new game that has been developed from the ground up, and although everything you've come to know and love from the original will still be there and the graphics and physics engines will remain relatively unchanged (more on that later), the rest of the game is noticeably different with a full singleplayer campaign featuring a variety of mission types, as well as new weapons, gadgets and most importantly, tweaked AI.

The Missions

One of the most interesting features of Condition Zero is the way Ritual has created the mission structure. There will be a variety of different scenarios and objectives for you to complete, however, each mission is unconnected, meaning that you will not have to play for hours on end until you reach a break in the story, and each mission will leave you with a sense of achievement.

Furthermore, mission briefings won't be given to you in the same way each time. For example, some missions will have you travelling to the appropriate location by car or helicopter, with your commanding officer briefing you along the way. You could even be dropped right in the middle of the action with the simple objective of escaping from the compound alive.

So far, possible mission objectives include rescuing hostages, escorting VIPs to safety, stopping bomb detonation, eliminating terrorist leaders, and even storming and securing enemy compounds.



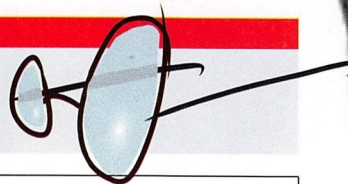
Why Counter-Strike: Condition Zero Deserves a Second Look:

Singleplayer mode for the world's favourite multiplayer game!

New guns, new ammo, new armour, new stuff, new newness!

Funky dynamic missions in exotic and interesting locations

Enhanced AI for bots and NPCs



WEAPONS

We are promised all of the weapons from the original CS will still be available - however, there are a few notable additions. Firstly, in addition to the regular combat knife, you are also able to wield a machete which features a significantly longer blade, giving you an increased attack range and allowing you to clear jungle fauna with ease. Furthermore, both terrorists and counter-terrorists each have a new rifle at their disposal - the Galil and Fusil Automatique respectively. It is said that the Galil will be fairly similar to the AK-47, yet slightly heavier and more accurate. Similarly, the Fusil Automatique is similar to the M4A1, however, it will cost less and feature a three round burst alternate fire. Those of you that have played Metal Gear Solid should be fairly familiar with this weapon.

GRAPHICS ENGINE

Surprisingly enough, Ritual have decided to keep both the graphics and physics engines from the original CS. The main reason for this is that one of the key elements to the success of Counter-Strike has been its low system requirements, and this needs to be kept in order for the game to be targeted at the same market. However, don't expect exactly the same level of graphics as in the current game. Ritual have raised the polygon count by a whopping 66%, meaning that each model has gone from 750 to 1,250 polygons. Furthermore, you will also be able to scale the level of detail to suit your system, meaning that those with higher-end PCs will still be able to enjoy relatively detailed facial animation, as well as higher quality terrain and full lip-synching. The particles system in Condition Zero also looks to be quite impressive, allowing for various weather effects including snow and rain, as well as aesthetically pleasing fire and smoke effects.

While specific details regarding the available missions and storyline are at the time of writing this article, quite vague, Condition Zero will definitely follow the tried and true Terrorist vs. Counter-Terrorist approach and will be set in modern times, much like the current crop of first person shooters of the same theme. From what has been revealed so far, Counter-Strike:

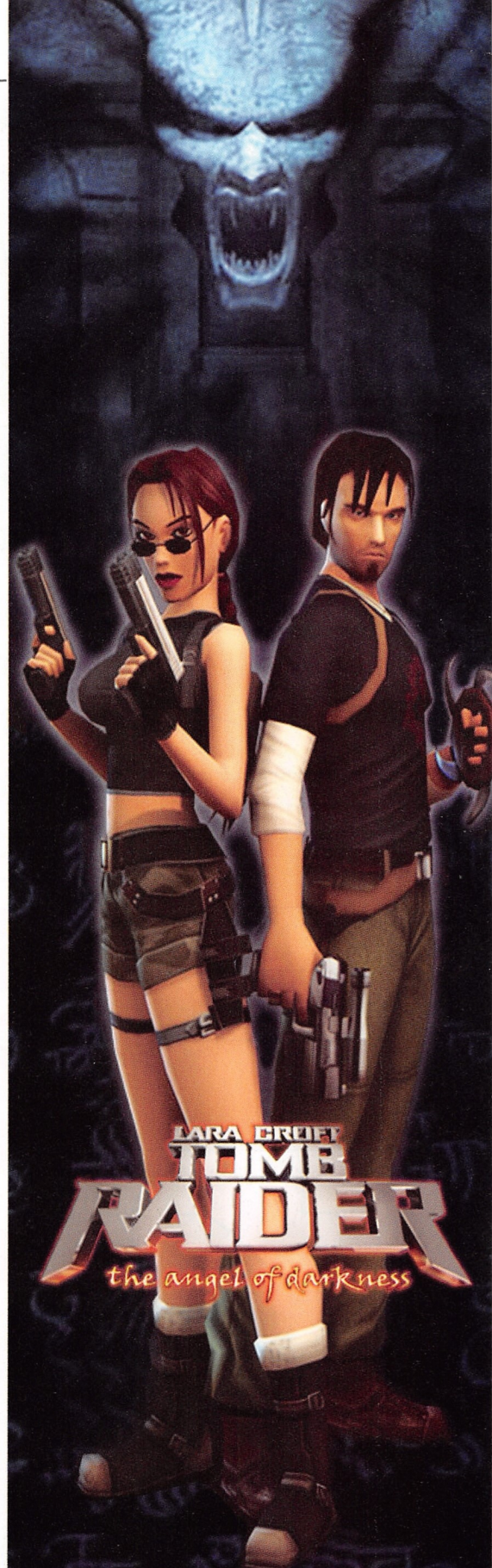
Condition Zero is certainly shaping up to be a very impressive title indeed. Although it's hard to make an accurate judgment on a game that hasn't even reached beta stages yet, with a release date of May 2003, we can only hope that preview code is made available to us in the near future.

Asher Moses

A variety of exotic locations provided for the easily bored



Like Elks in rut, these men attempt to batter each other into submission



LARA CROFT
**TOMB
RAIDER**
the angel of darkness

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GAMENEWS

HEADLINES: Auran gets you to develop its games ■ AGDC goes off ■ Televised gaming awards
■ Dataglove makes a comeback ■ Women still battered in games ■ Tribes 3! ■ Bunnies and Hef get game

SECOND LIFE A MMORPG that's only 8MB and doesn't have patches? Yes please!

The Sims Online used to be unique among MMORPGs for being more or less anti-violence. It might have disappointed some gamers but it proved that online games don't have to mimic rules developed for Dungeons & Dragons over 20 years ago in order to build a following.

Second Life is taking the concept further, giving players a new direction in massively multiplayer gaming wrapped up in new technology. It is being developed by Linden Labs and the incomplete software garnered a place in Time magazine's technology of 2002. So what's so special about Second Life?

The project is being headed up by the former Chief Technical Officer of RealNetworks, Philip Rosedale. It's his wealth of expertise and experience in Internet information streaming that makes Second Life possible. The game has a very small core program of about 8Mb and the rest of the data that creates your world is streamed to you from the Internet.

This technology offers several benefits. For one, the system never has to go down for world updates, nor are there any large files to download at logon. Beyond that, the world can constantly change around the players in real-time. Each server is a "Simulator Zone" and processes one area but these are all seamlessly linked. The only major drawback is that players require a broadband connection.

The system allows the free form nature of the game to take shape. The concept

behind the game is that players choose to create the world they want on a virtual blank slate. In-game Avatars don't need to eat, sleep or take toilet breaks. A percentage of character earnings is even skimmed for welfare so players don't have to work either. Furthermore, positive comments and reputation generate spending-cash meaning you can get by on charm. There is even the freedom to fly.

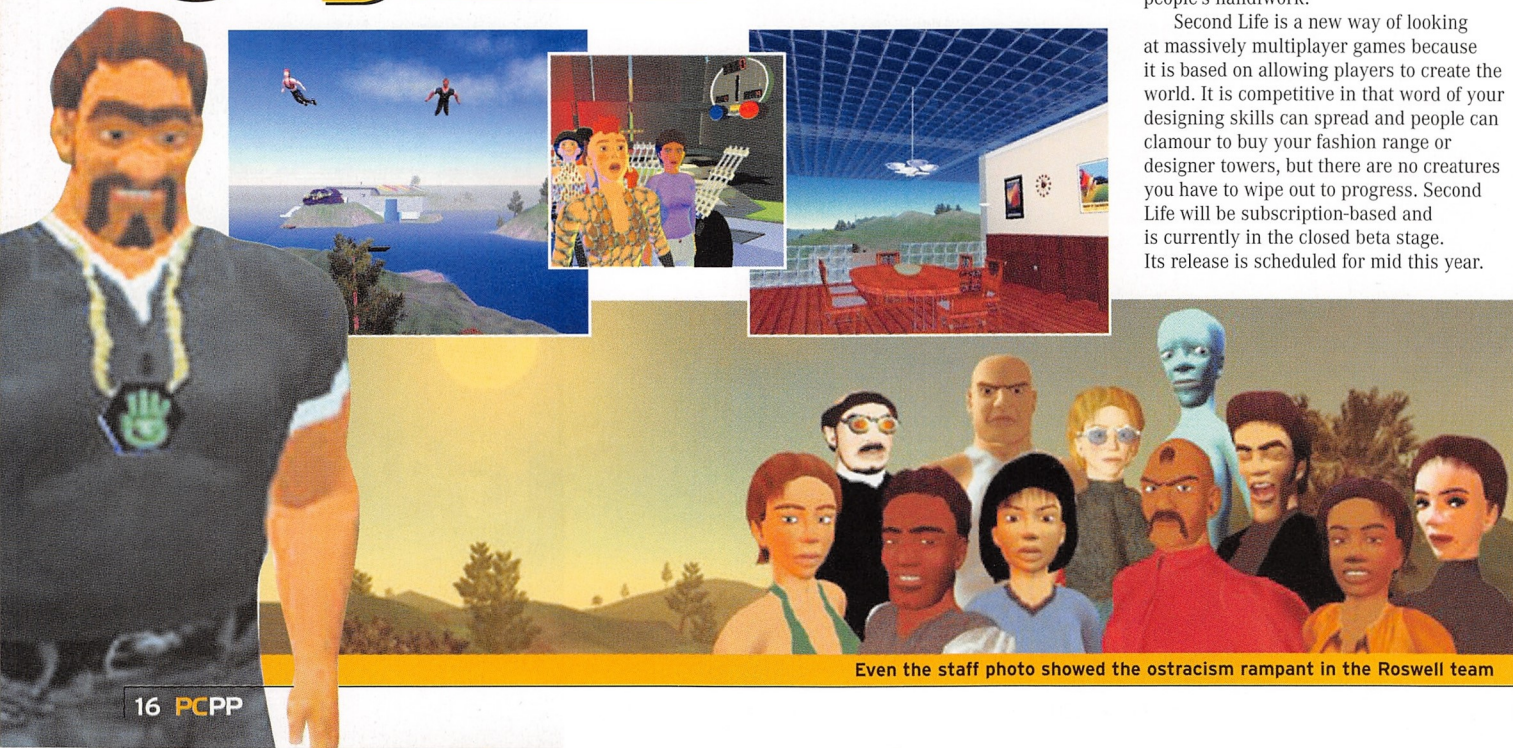
The game comes with an in-game editor which works like 3D design program and players can come and watch you create things in real-time complete with programmed behaviours and special effects. Players can build a hobbit hole from scratch, work in teams on major civil works or create duck slippers that quack when you walk - these are a current fan favourite.

Players looking for action can get some of their modding buddies to join the game and create guns and arenas.

The most impressive show of what can be done is the in-game disco. Here players can bust their own user-created dance moves or mix music samples at the DJ booth. The tunes you play can be heard in real-time - like the streaming Realplayer - and other players can rate your skills with a simple button press. If you're good enough you can get a pass into the VIP lounge.

Although the editing tools will allow for amazing creativity the developers believe that most players will choose to buy a majority of the toys they use in the game, and if you don't have a creative streak you can spend your time exploring other people's handiwork.

Second Life is a new way of looking at massively multiplayer games because it is based on allowing players to create the world. It is competitive in that word of your designing skills can spread and people can clamour to buy your fashion range or designer towers, but there are no creatures you have to wipe out to progress. Second Life will be subscription-based and is currently in the closed beta stage. Its release is scheduled for mid this year.



Even the staff photo showed the ostracism rampant in the Roswell team

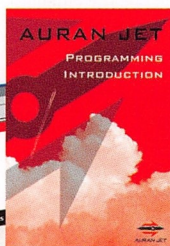
AURAN GAMING CONTEST

Why pay R&D when fans can do it for you?

The Next Year's Game competition has been launched by Auran at the Australian Games Developer Conference. The contest is being sponsored by tech firms Intel, Discreet and nVidia and each is contributing to the \$100,000 worth of prizes.

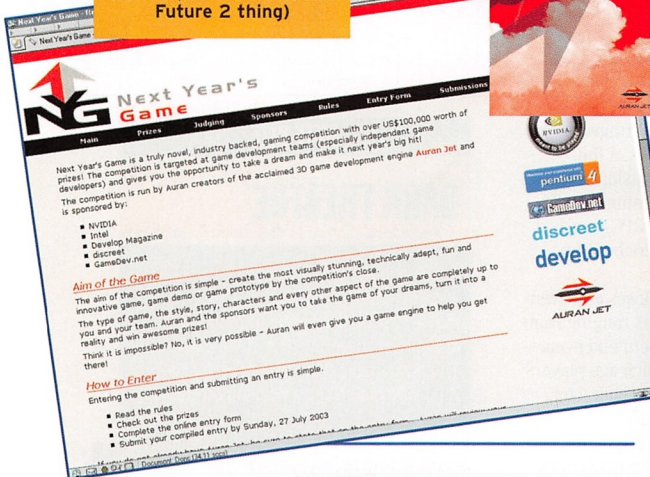
The idea behind the contest is to design a game and then produce a demo for it using Auran's in-house engine:

Biff's new website made a million (it's a Back to the Future 2 thing)



Auran Jet. Jet normally costs \$230 for a non-commercial license but if the evaluation team see merit in a given entry it will send a free copy out to develop the idea.

The winning entry will get its copy of Jet upgraded to a commercial licence as well as receiving two top-of-the-line Intel P4 computers with Nvidia graphics cards, the new 3D Studio Max and a place on the Sparks developer program as well as having articles published in Develop Magazine. The second and third prizes also include hardware, commercial licences and 3D Max. The contest closes July 27, so get into it!



BYTE SIZE

HONDURAS HOODOO

The Honduras government has banned all violent computer games in a response to brutal youth gangs known as Maras. Banned games include Quake, Doom, Shadow Man, Street Fighter and Resident Evil. Retailers have been given six months to get rid of offending stock. Honduras is one of the poorest countries in the Western hemisphere so how effective this move will be is anyone's guess.

AUSTRALIAN GAMES DEVELOPER CONFERENCE

Where we discover Australia isn't the arts end of the world after all!

The fourth annual Australian Games Developer Conference was held in Melbourne. Even with tickets going for almost \$900 more than 600 delegates attended. A further 400 games enthusiasts descended on the Conference for the LANfest multiplayer competition. Several big names from the international development scene also made it down under to attend.

The Conference kicked off with Bioware's Dr. Ray Muzyka giving a keynote speech about the nuts and bolts experience of developing a game on the scale of Neverwinter Nights which had a peak team of 75. Delegates also heard from Lars Gustavsson of Digital Illusions about Battlefield 1942 as well as from Doug Church of Ion Storm.

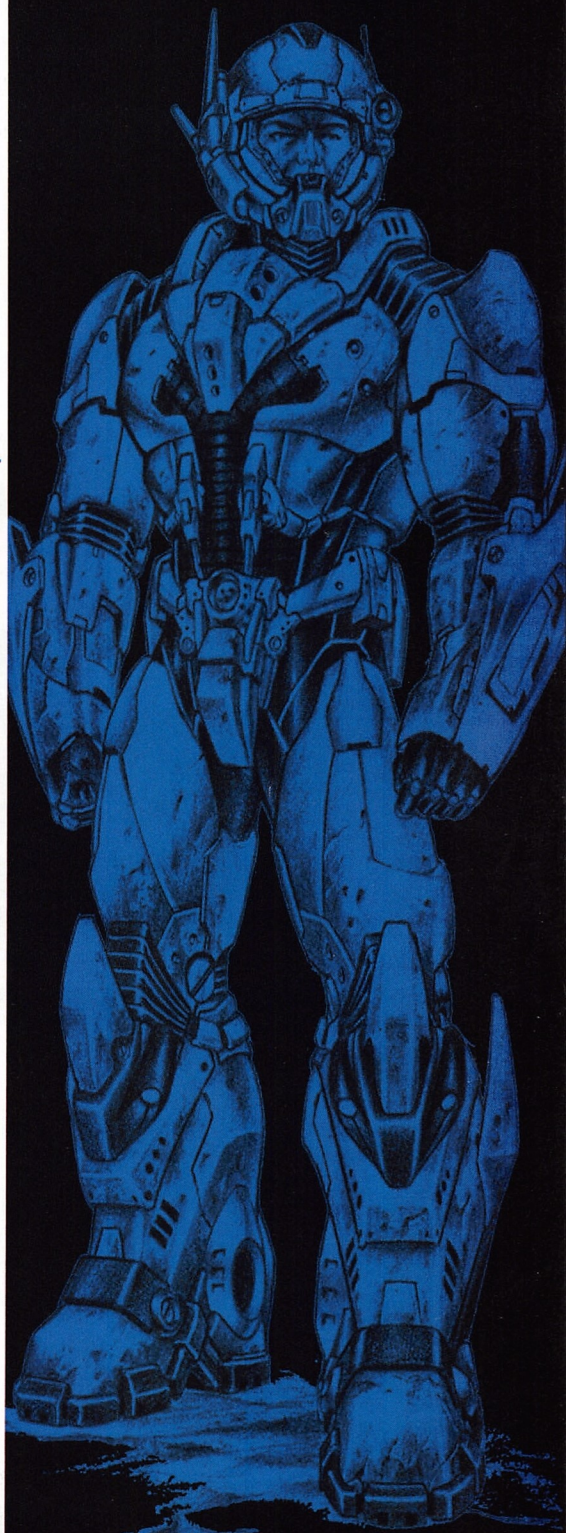
The Vice President of Developer Relations for Sony Computer Entertainment Europe also attended, displaying a performance analyser for the PS2. He said that Australia was having an increasing impact on the global development scene and was only behind the UK, France and Scandinavia as a SCEE development centre.

Microsoft were not to be outdone and Xbox was represented by four speakers giving tutorials as well as the Director of Advanced Technology Groups, Laura Fryer.

Several awards were also judged and presented at the Conference for Australian Games Development. Irrational's Freedom Force scooped Best PC Game and Best Design, Outstanding Innovation went to MicroForté for its Big World Technology. Best Character Design was taken by Krome for Ty the Tasmanian Tiger and Evolution Studios was named Best New Start-up.



Even giant blow-up animals couldn't save the CPA's Christmas party



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GAMING NIGHT OF NIGHTS

TNN Plans Televised Games Awards



American TV network TNN has its sights on launching an annual awards show for computer games and is hoping the program will help grab the 25 to 34 demographic.

TNN is assembling an industry advisory board to help organise the event and the winners will be voted on by fans and industry insiders alike. The event is planned

for third quarter, but the first members of the advisory board have already pointed out that this will mean missing the Christmas game releases and hence a big slice of new AAA titles.

The games show will look forward to upcoming games while honouring released titles with awards including: Coolest Villain, Hottest Heroine, Hottest Graphics, Most

Addictive, Best All-Round Bad Ass, Hardest to Master and Coolest Free-for-All Carnage. If Jack Black presents, we're in.



Big Bird may have won this battle, but Gordon would have his revenge



EON OF TEARS

Let's get Biblical



Canberra's new sewage works frightened the locals

In a time where national tragedies have polarised the views of the politically correct, Evillusion is taking a controversial path by choosing to make its first game a first-person RPG/survival horror game in which players become characters from the Bible.

Players become Cain, Moses and even Jesus and play through areas ranging from the Garden of Eden, Jerusalem and even Sodom and Gomorrah. In each age players will assume the role of a new character, carrying over their experience.

The gameplay is not locked to the exact history laid down in the Good Book and if you choose the dark side you'll end up in Judas' shoes rather than the Messiah. Players will influence how the world unfolds but some things such as the Crucifixion and Jesus being a good guy are going to be set. Eon of Tears is scheduled for 2004.

BYTE SIZE

DARK THEATRE

The Alone in the Dark series is coming to the big screen. The movie is scheduled start photography in the next month or two in Vancouver. The rights have been picked up by Boll Kino who is currently working on House of the Dead. Kino will Direct and Produce.

GeForceFX disappointed gamers



BYTE SIZE

BIGGER BROTHER

The US government is proposing an Internet-wide monitoring program under a proposal called the National Strategy to Secure Cyberspace. The latest version of the proposal puts the centre under governmental control, while previous versions of the proposal had a private sector consortium running the gig. The government has come out saying that it wouldn't use the centre to monitor individual e-mails. Civil libertarian groups are far from convinced.



The Staring Competition rated surprisingly well

BYTE SIZE

DRAG NET

The Australian Bureau of Criminal Investigation is putting together a hi-tech research system to "predict and disrupt criminal activity". The system will tie together information and intelligence from all of the individual Australian Law Enforcement Agencies. The \$11 million project will also include additional support and analysis staff to help take a more proactive approach to crime. Sounds like a unit for a new game.

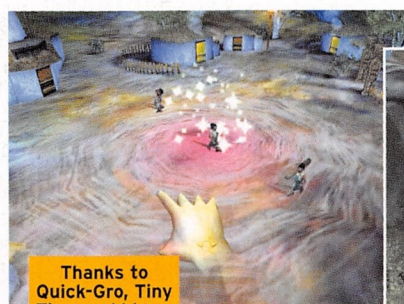
BLACK AND WHITE GLOVES?

Hokey sci-fi controller obsolete for years makes unexpected comeback

Lionhead has released a new addition and patch for the original Black & White which allows it to be controlled with Essential Reality's P5 glove.

With the glove controller players are now able to use their hand to control to their virtual hand in the game, picking up and throwing objects, or villagers, with natural grabbing and throwing motions, casting spells by making the correct gestures in the air and punishing your creature with a flick of your wrist.

While Black & White is the logical choice for demonstrating the power of a glove controller - since your avatar is a god-like hand - three other games beat it to the punch: Hitman 2, Tiger Hunt and Beach Head 2002 were the first to fully support the P5.



Thanks to Quick-Gro, Tiny Tim would have vengeance!



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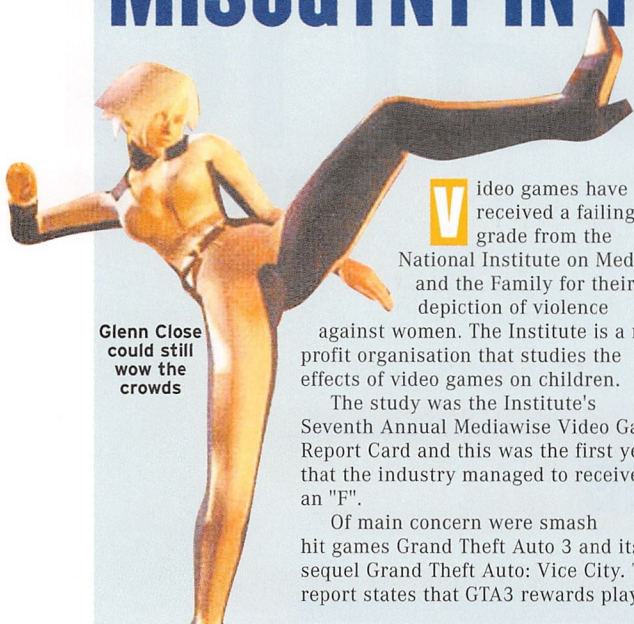
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MISOGYNY IN THE MACHINE

In-game violence targets women



Glenn Close could still wow the crowds

Video games have received a failing grade from the National Institute on Media and the Family for their depiction of violence

against women. The Institute is a non-profit organisation that studies the effects of video games on children.

The study was the Institute's Seventh Annual Mediawise Video Game Report Card and this was the first year that the industry managed to receive an "F".

Of main concern were smash hit games Grand Theft Auto 3 and its sequel Grand Theft Auto: Vice City. The report states that GTA3 rewards players

for murdering a prostitute after having sex with her, and that GTA: Vice City takes off where GTA3 left off in violence towards women. BMX XXX also came under fire for degrading women and portraying them as sex objects.

We think that's all a bit harsh: everyone gets beaten up without discrimination in GTA games, and we're pretty sure BMX XXX is degrading to everyone, especially people who actually play it. The report card was as follows:

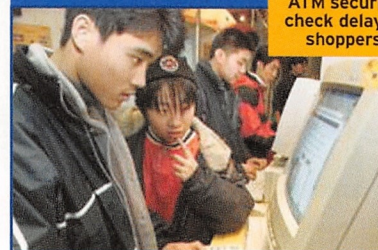
Accuracy of Ratings	D
Ratings Education	C
Retail Enforcement of Ratings	F
Overall Grade	F

BYTE SIZE

CHINESE CRACKDOWN

After a fire in an Internet Cafe killed 25 people in China last June, the government has cracked down on the establishments closing more than 3,300 permanently and another 12,000 temporarily. Two teens have been given life imprisonment for setting the fires. Authorities claim that Internet Cafes are a moral danger and allow access to harmful materials online. New rules have made Cafes illegal for under 15's and owners must now keep records on their patrons.

Westpac's new ATM security check delayed shoppers



BYTE SIZE

"A" HACKING

A 15-year-old hacker by-passed the security on his school's computer and changed his grades from a perfect 4.0 average to 1.9. That's a change from an A+ to D+. He thought that it was funnier that way. The hack was sanctioned by the school and has led to beefed up security on the system. It took the Californian student's program only a fifth of a second to crack the school password.



Alas John's parents heard G4 instead of GeForce4

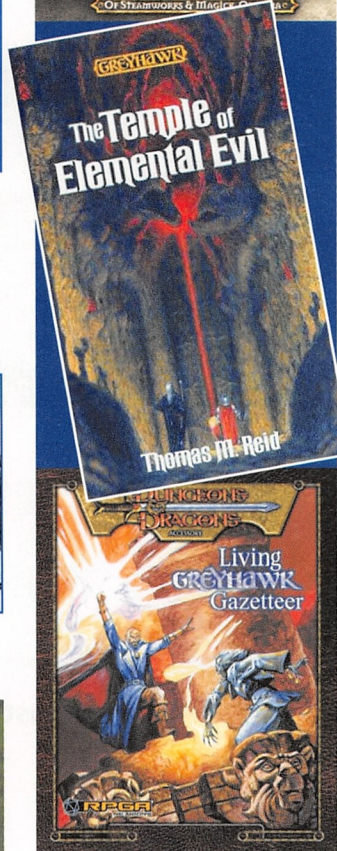
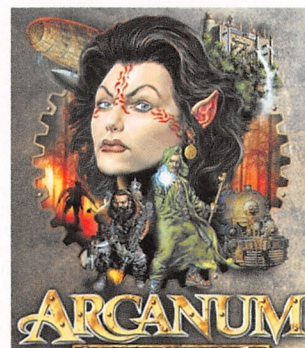
BYTE SIZE

BRAINY BOT

Rat's arse still might not be worth much but a rat's brains might be a whole different story. Georgia Institute of Technology's Professor of Biomedical Engineering Steve Potter has developed a small robot, a bit bigger than a fist, that is controlled by rat neuron cells sitting on a silicon chip a couple of metres away. The chip transmits signals to the bot and the bot's sensors transmit information back to the cells. The "brain" has shown signs of changing dependant on the stimuli and Potter insists the brain is developing. The study is for emergent properties in neural networks.

TROKIA RETURNS!

Developer of Arcanum at last takes the D&D road



Games studio Troika is developing the next Dungeons & Dragons computerised role-playing game. Troika is best known in RPG circles for Arcanum: Of Steamworks & Magick Obscura, which used a proprietary roleplaying system rather than TSR's (now Wizards of the Coast's) classic. Troika will give up the steamwork and will be working on the magick obscura of bringing the 1985 pen-and-paper module the Temple of Elemental Evil to your computer. BioWare and Black Isle have had great success popularising the Forgotten Realms setting and now Troika is hoping to do the same with the original Dungeons & Dragons world of Grey Hawk. It is planning to use its dialogue system to integrate more non-combat skills like diplomacy and bluff into the gameplay and a character's starting alignment will affect the starting position and ultimate goals for seeking out the Temple. Temple of Elemental Evil has been in the works for a year and is scheduled for a June release.

TRIBES 3 EXISTS! Poetic tribute on the boards receives confirmation

On the Tribal Wars Forum a thread called "The Perfect Tribes 3" was started with a poem. This literary masterpiece highlighted desired features for a third Tribes game and was posted collectively by "The Tribal War Whores". A few replies down, Sierra's Marweas posted his own poem ending with these lines: "No more a question - may or might/The next Tribes game got a green light."

Other pieces of poetic information include: "An open beta early on/Will help make sure the bugs are gone", they

claim you won't need a GeForce 5 to run it and that the Lance, Bomber and Tank are likely to return "They'll be better this time though". Nice rhymes.



The New Falcon raised some hairy questions

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EVERYTHING CONNECTED



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PLAYBOY

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HUGH ...
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HUGH!

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CARRERE
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BUNNIES GO DIGITAL!

Hef scans the girls
to make more
big bucks

BUILD
YOUR OWN
BUNNY EMPIRE

Playboy: Like you've never Playboy'd before!

Playboy has announced an international licensing agreement with ARUSH Entertainment and Groove Games. The resulting game will be released on PC, PS2 and Xbox and is expected to surface around 2004.

The first game off the ranks will put players in the smoking jacket of Hugh Hefner while they try to successfully build

a Playboy empire and live the Playboy lifestyle. The seven-year license covers using the Playboy brand for simulation games and ARUSH is planning a big marketing push in the magazine.

A recent Mediabank Research Inc. study found that 3.1 million Playboy readers spent \$US300m on computer and video games in the past year making a game tie-in an obvious choice. We'll keep an eye on it, but just for the gameplay...

BYTE SIZE

SHARP 3D

Sharp is planning on selling 3D display flatscreen and laptop monitors before the end of this year. General Motors has expressed interest in 3D displays for its design department. The technology doesn't require 3D glasses, but uses two screens with a parallax barrier to split the image before it leaves the monitor. Each eye sees a slightly different image giving viewers depth perception. Currently, viewers need to be 40cm from the screen to avoid seeing overlapping images and faint vertical lines can be seen in the picture.

Sharp is still fine-tuning.



EMOTION DETECTOR

It Knows When You're Frightened

A team at Vanderbilt University is working on a computer that can tell how its user is feeling. The system will feature electrodes which monitor heartbeat, sweat production, and minute muscle contractions around the jaw and brow.

Currently, the system just says, "I sense that you are anxious. Is there anything I can do to

help?", but the system could have many applications, one of which would be on the battlefields of the future. The system could tell when soldiers were under stress or needed help.

It could call for backup if the soldier was unable to speak to others or offer direct assistance. Just imagine how freaky System Shock 3 would be hooked up to this thing.



BYTE SIZE

SOFTWARE-UNITIONS

Don't shoot, shoot, shoot, that thing at me! Multi-Gen Paradigm has found that it has to ask permission to sell its visualisation software to new clients since the government reclassified its program as "munitions". The US military and its contractors use the visual simulation software for missile and other weapons training prompting the State Department to make the decision.

BYTE SIZE

LINUX HOMES

Sony and Panasonic have signed an agreement to develop Linux applications for digital home devices like home and portable audiovisual equipment. Under the Linux license the code would become open source. Household consumer goods running on open source software brings Jetsons homes one step closer.

MORE CHARACTER FOR HORSEMEN

Stan
Winston
Joins
Apocalypse

Stan Winston has signed on to collaborate on the 3DO game Four Horsemen of the Apocalypse. Although you might not know his name, you'll know his work.

Winston has had Oscar nominations for his creature design work on John Carpenter's The Thing, Predator, Edward Scissorhands, Batman Returns, and Jurassic Park: The Lost World and actually won four of the golden men for Aliens (1986), Terminator 2: Judgment Day (1991), and Jurassic Park (1993).

Winston has seen enough potential in the storyline for his company to pick up the film options for the project. He joins the Hollywood talent of actors Lance Henriksen (Aliens), Tim Curry (Legend, Charlie's Angels) and Traci Lords (Blade) as well as celebrated comic book artists Simon Bisley and Dave DeVries.



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1992 and 1993



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 PlayStation.2

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GAME CHASER

Welcome to the section where we give you a brief rundown on ten games that have recently crested the horizon, but don't quite warrant the full preview treatment. Many of these games don't yet have distributors in Australia, so there's a chance we may never see them washed up on our pristine beaches. But if we know about them, and make enough noise, well who knows...

With Timothy C. Best

THE MOVIES

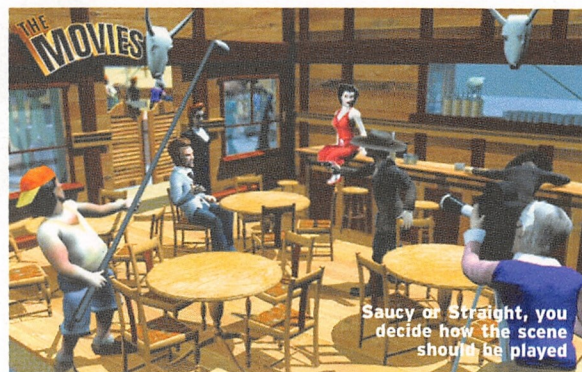
Developer: Lionhead ■ Publisher: TBA ■ Distributor: TBA ■ Available: TBA

The cutthroat world of the movie producer. Can you survive the horrors? Set in the 1920s, The Movies will cast you as movie mogul blazing new trails in cinematic history.

You will select your actors, buy scripts, construct your production buildings and sets and shape the future of the movie business. Will your studio capture the first on-screen kiss? Will you show risque calves or have the most rootingest, tootingest brawl ever to hit film?

Lionhead plans to make things even more hands-on by putting players behind the camera to direct pivotal scenes.

Keep the money flowing and give the public what they want and Lionhead plans to keep you in virtual business right up to today and beyond. Can you say Smell-o-vision?



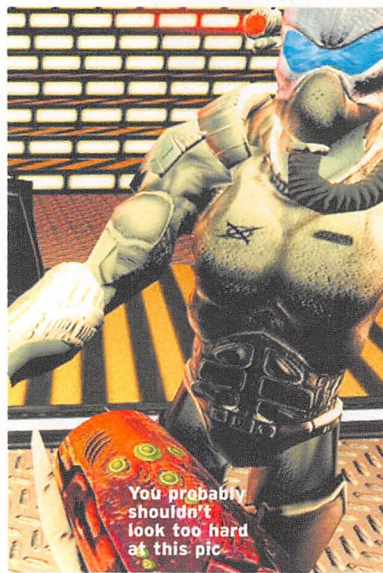
HELIX CORE

Developer: Bright Light ■ Publisher: TBA
■ Distributor: TBA ■ Available: TBA

Helix Core is the ambitious debut for the newcomers at Bright Light Productions. They have a vision of a co-operative multiplayer action game for up to 64 players. Their vision of teamplay goes up to having the option of 20 players working together to pilot a devastating Capital Ship while the rest of the squad flies support in smaller craft.

The game will pay players cash for each small victory so, as the game plays out, teams can pool resources to afford bigger and better engines of destruction.

Battles will be fort on sprawling maps beneath the stars as well as out in the midst of them. Unsurprisingly, Helix Core is set in the distant future where ruthless governments pay people to beat the snot out of one another.



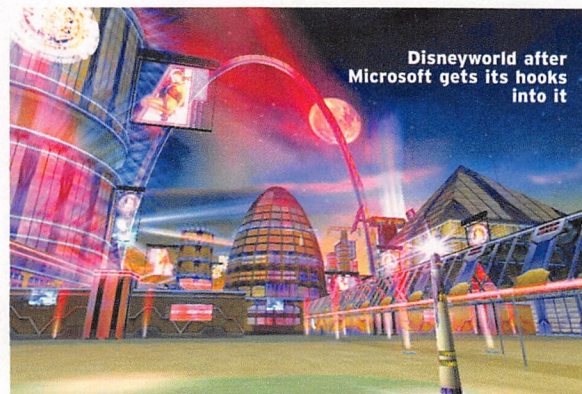
SABOTAIN

Developer: Avalon Style ■ Publisher: CDV ■ Distributor: TBA ■ Available: Q3 2003

In the far future, the Confederation of Independent Worlds fights against the regimented influence of the Imperium.

In the shadowy streets of Miracle City one man is behind enemy lines trying to open the way for this Imperium via any means possible. That'd be your character. Sabotain will put you in the role of a highly trained agent on a mission of espionage, blackmail, extortion, deception and blowing things up.

The game is set to feature a non-linear approach to 18 core missions, surrounded by a host of side quests. Non-linear = scheming potential. Get those sabots ready.



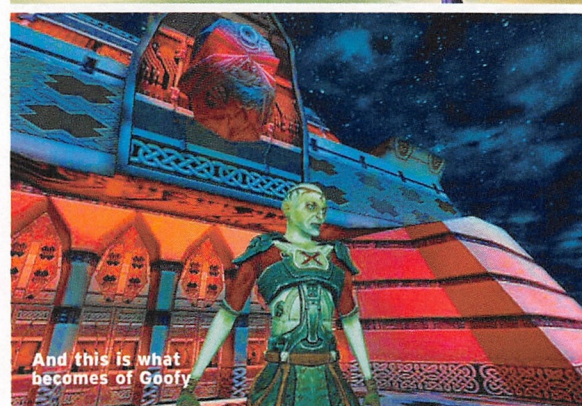
WARHAMMER ONLINE

Developer: Climax ■ Publisher: TBA ■ Distributor: TBA
■ Available: 2004

The online version of Games Workshop's RPG promises a faithful translation of its darkly gothic yet renaissance setting of steam tanks, black powder handguns, swords, large hats and gritty art design. It also promises a magic system which comes at a deadly price to unwary practitioners. Warhammer was always more brutal than D&D and that's part of its rusty charm.

Character creation does away with classes, replacing them with careers which you can freely move between - each offering a range of skills, abilities, guilds and alliances to choose from every time you advance.

Warhammer Online shows all the signs of a flavoursome MMORPG with 20 years of background for seasoning.



CLERIC

Developer: Plutonium Games ■ Publisher: TBA
 ■ Distributor: TBA ■ Due: 2003/2004

Plutonium Games asks the question, "Who better to survive survival horror than a priest?" It seems the answer they came up with was a Cleric. Cleric will put players in the role of a 16th century Russian holyman investigating disturbingly unholy goings on.

The game will offer a choice of gods to evoke for various powers, but mixing-and-matching can anger gods with nasty results. Plutonium promises reactive ratings for both faith (the character's feelings about a god) and favour (the gods' feelings about the player) meaning acting in character gives you power - and holy power at that. Cleric is still very early but the Serious-Sam powered graphics give a taste of the atmosphere to come.



SOLDNER: SECRET WAR

Developer: Wings ■ Publisher: JoWood ■ Distributor: Red Ant ■ Due: Q2 2003

In the future of Soldner, war has moved away from massive armies and towards high-tech elite forces that can strike with surgical accuracy. Players will be placed in control of a strike force operating out of a disguised Merchant ship with VTOL airplanes, helicopters, tanks and sniper rifles.

Wings Simulations is aiming for a realistic "tomorrow's army" feel with this tactical sim and a part of that is having players deal with the effects of their every choice: Every piece of landscape and building can be reduced to a smoking crater and collateral damage could have long-reaching political implications for your campaign - dynamic mission generation is touted as seeing to that. Boasts of impressive team-based multiplayer options help round out the Soldner concept.



SUPREME RULER 2010

Developer: Battle Goat ■ Publisher: Strategy First ■ Distributor: TBA ■ Due: Q3 2003

Battle Goat is attempting to bring us a strategy game of global proportions. Economics, diplomacy and conquest will all feature with maps as accurate as satellite images can reasonably make them. BG envisions a game where players will be able to seize territories and build an industrial complex including Uranium Mines, Timber Mills, Oil Wells, manufacturing plants and munitions factories.

Naturally, some territories will be better suited to some things than others - for example you'll probably want Uranium under your Uranium mine. Military units will be available based on tech level and geopolitical-specific equipment lists including US, Russian, Chinese and Israeli gear.

Supreme Ruler will feature a real-time mode for multiplayer action as well as a turn-based option for more thoughtful solo play.



FUNG WAN ONLINE

Developer: P.H.O.E.N.I.X. ■ Publisher: Epic! ■ Distributor: TBA ■ Due: Q2 2003

If Phoenix lives up to its online concept, players will be able to roam the mystic East of Fung Wan and wage real-time martial arts battles, crushing all comers, to become the supreme master of kung fu. Players will choose to study the bow, sabre, staff, sword or fist and with a theoretical maximum of 1500 people online at once there should be plenty of contenders.

There will be the possibility to join or destroy clans and wiping out a clan will do more than just earn enemies; it will stop the production of clan items and make clan techniques almost impossible to learn. There will also be a mentor system for those needing to call people "Grasshopper".



DEADLANDS

Developer: Headfirst ■ Publisher: TBA ■ Distributor: TBA ■ Due: Q2 2003

This game is the next project on Headfirst's plate as soon as they finish Call of Cthulhu: Dark Corners of the Earth. It's jumping from one dark pen-and-paper RPG adaptation to another. The Deadlands world merges the wild west with dark magic, rampant undead, alchemy and over-the-top Jules Verne gadgets that would make Emmet Brown's stay in the Wild West look normal.

Headfirst is promising some interesting things with Deadlands, such as the ability to design and model your own character, dynamic landscape that changes based on fear, and the Genesis engine that generates missions and levels as you play.

COLONIES

Developer: Acid Storm ■ Publisher: Garagegames ■ Distributor: Garagegames Online ■ Due: TBA

Colonies will be a futuristic, team play-oriented, FPS game using the Tribes 2 engine. What's the twist? RTS team development and tech trees. As the game progresses all of the players will get to vote on which tech their team will research next. Do you want Gunships or to be able to teleport Engineers in to fix vehicles?

Three classes are planned, the standard Soldier, the Engineer and the stealthy Riftwalker. When the rift technology is researched, Riftwalkers will move through enemy lines seen only by other Riftwalkers who can then battle it out in their out-of-phase world. Colonies is passing through the pre-alpha phase so We'll have to wait and see what's next on Acid Storm's tech-tree.



If this is the future, then cancel my LE booking now!

TECH CHASER

So many useful little gadgets and components are released each month, there's no way we can possibly give them all the half-page review treatment in the PCPP Tech Bunker. So welcome to Tech Chaser! Each month, we'll round up ten essential-but-unexciting, simple-but-necessary and plain weird tech bits for your consideration. Let us begin!

With Asher Moses

SONY 32" PLASMA TV

Price: \$10,499 ■ Distributor: SonyStyle ■ URL: sonystyle.com.au ■ Phone: 1300 720 071

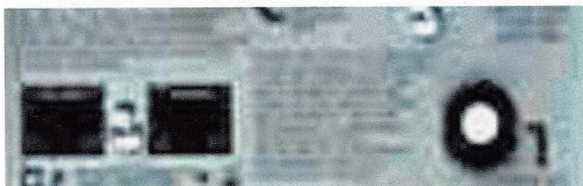
Do you have so much money that you have absolutely no clue as to what to do with it? Well, aside from buying yourself and all your friends a DVD PowerPlay subscription, the next best thing we advise you to do is go out and purchase a plasma TV! The particular unit we're showing off this issue happens to be from Sony and, due to the fact that it comes HDTV ready with built in surround sound speakers and measures in at a massive 32 inches, it certainly ensures that you will never have to go to the cinema again!



APC 620 SMART UPS

Price: \$525 ■ Distributor: UMart ■ URL: umart.com.au
■ Phone: 02 9745 0877

If you've ever had to endure the frustration that comes along with losing hours of unsaved work due to an unexpected power outage, you've most likely already gone out and purchased an uninterruptible power supply (UPS). However, those that haven't had this experience still have the chance to prevent this disaster before it happens. Once installed, a UPS will provide backup battery power in the event of a power outage, usually lasting long enough for you to identify the source of the outage and restore electricity. If you happen to have multiple PCs running from the one household, the APC 620 Smart UPS seems to be the most logical option with an estimated runtime of around 1 hour and 40 minutes.



SONY AIBO GOLD

Price: \$3000 ■ Distributor: SonyStyle ■ URL: sonystyle.com.au ■ Phone: 1300 720 071



Ever dreamed of having an interactive pet that doesn't eat, sleep or poo all over the carpet? Well, thanks to recent advancements in AI technology, this is now possible, with one of the most common electronic pets being the incredible Sony AIBO. This dog-like creature will sit when you tell it to sit, dance when you want it to dance, and even walk up to you when you call its name. It is also capable of learning and unlearning certain behaviour, has four senses (sense of touch, hearing, sight and balance) and can even take pictures! Awesome!

JATON X-MEDIA DREAM BOX

Price: \$286 ■ Distributor: TechBuy ■ URL: techbuy.com.au ■ Phone: 02 9648 1818

Have a spare monitor lying around but no computer to plug into it? Why not turn it into a TV with Jatón's X-Media Dream Box!? Its plug and play ability and bundled remote allow for convenient installation, and support for resolutions of 640x480@60Hz, 640x480@72Hz, 800x600@60Hz and 1024x768@60Hz mean that image quality will be close to, if not greater than the standards provided by modern television sets. Furthermore, you are also able to hook up a VCR, as well as any video game consoles through the provided AV, S-Video and RCA inputs.



NOKIA 3650

Price: TBA ■ Distributor: Nokia ■ URL: nokia.com.au ■ Phone: TBA

Sure to make any hardcore geek require a change of underwear, the Nokia 3650 clearly outlines the rate at which portable computing is moving. Aside from making phone calls, the 3650 features an inbuilt digital camera capable of capturing at resolutions of up to 640x480. Furthermore, its 4MB of internal memory also allows you to view streaming video as well as browse the web and play both midi and wav ringtones. Other handy features include voice dialing and recording, as well as bluetooth and infrared support that allow you to play multiplayer games against your mates. Weighing in at just 130 grams, you won't feel like you're lugging around a brick either. Score!



SONY CYBERSHOT U

Price: \$699 ■ Distributor: SonyStyle ■ URL: sonystyle.com.au ■ Phone: 1300 72 0071

Since their inception, digital cameras have gone from being massive brick-like objects to tiny featherweight devices that can easily fit into your shirt pocket or even the palm of your hand. One of the companies spearheading the advancement of digital photography is, unsurprisingly, Sony, who have just announced their latest product - the CyberShot U. Measuring in at just 8.45cm and having a megapixel rating of 2.1 as well as a 1" colour LCD, the Cybershot U is sure to make you the envy of all your friends with its amazing resolution and picture quality. That said, at a price of around \$699, it certainly isn't the cheapest digicam on the market!



CPU COOLING DUCT

Price: \$45.10 ■ Distributor: AusPCMarket ■ URL: auspcmarket.com.au ■ Phone: 02 9746 0900

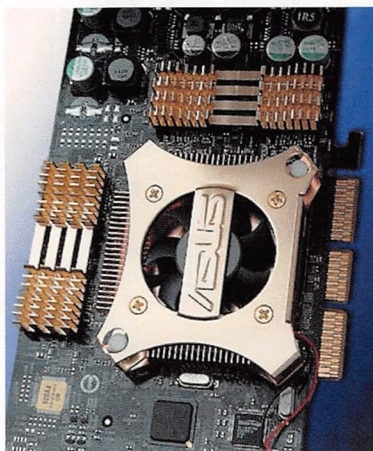
Said to reduce CPU temperatures by 5-10C, these newly released cooling ducts are looking to be the next big thing in mainstream CPU cooling technology. Although many keen overclockers have taken the initiative to make their own ducts, these are the first units we've seen being mass produced for the mainstream market. You are able to purchase the ducts in 60mm, 70mm and 80mm sizes, which, once installed, work by drawing cool air from the outside of your case, through a flexible aluminium duct directly onto your CPU, where it is then directed out of your case by a chimney-like device. Although expensive, they're well worth it for hardware enthusiasts and overclockers alike.



ASUS V9280 GEFORCE4 TI4200-8X

Price: \$389 ■ Distributor: TechBuy ■ URL: techbuy.com.au ■ Phone: 02 9648 1818

To fill the gap between the original GeForce4 series and the soon to be available GeForceFX, nVidia have recently announced their GeForce4 Ti4200-8X chipset. Like the GeForce4 MX440-8X reviewed a number of issues ago, this chipset is identical to the current crop of GeForce4 Ti4200 cards, with the only exception being added support for AGP 8X. As you have seen from both our internal benchmarks and benchmarks from around the web, the performance difference between AGP 8X and AGP 4X is, at this time, quite negligible and certainly not worth the upgrade for current GeForce4 owners at this point in time. However, if you're upgrading from an older graphics card such as one based around a GeForce2 or GeForce3, the Asus V9280 GeForce4 Ti4200-8X provides high performance at a very reasonable price.



PSU MOD KIT

Price: \$US11.24 ■ Distributor: Cutting Edge Casemods ■ URL: Cuttingedgecasemods.com.au ■ Phone: TBA

Ever felt the urge to turn your boring, regular looking power supply unit (PSU) into an all singing, all dancing work of art? Well, thanks to Cutting Edge Casemod's PSU mod kit, this is a relatively simple task to perform. Made from 1/8 thick cast acrylic, this cover is designed to replace the generic metal cover that comes stock with most units, and can basically be considered as a window mod for your PSU! As you can see from the picture, it sure does look cool, but is it worth roughly \$AUD22 plus the cost of shipping from the US? We'll leave that for you to decide, but if you are a frequent LAN party goer and like to show off your PC, you should definitely check this one out!



SKYHAWK ALUMINIUM CASE

Price: \$223.30 ■ Distributor: Eyo ■ URL: eyo.com.au ■ Phone: 02 9822 2550

A great alternative to the expensive Lian-Li range of PC enclosures has always been SkyHawk - a comparatively small company known for producing relatively high quality aluminium cases (slightly below the standard of Lian-Li), but selling them for a fraction of the cost. One of the latest products in this range is SkyHawk's Mercury case, featuring a slick pre-installed side window with built-in 8cm fan and a sexy front panel decorated with coloured acrylic plates. Coming at a bargain price of just \$223, this may be the next PC accessory to add to your wish list.



AUSTRALIA'S MOST WANTED

The games you want to play now, but still have to wait for

1 C&C Generals

2 Rome: Total War

3 Freelancer

4 Doom 3

5 Unreal 2

6 Sims Online

7 Star Wars Galaxies

8 Splinter Cell

9 Vietcong

10 IGI2

Australia's Most Wanted is collated monthly from votes sent to:

amw@pcpowerplay.com.au. Be a part of it, send your 10 most wanted games today!

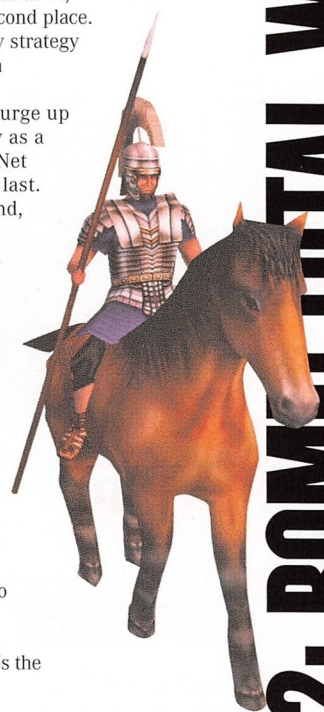
Another month, another bushel of votes to sort through and plug into our smoking and rattling Access database and generate a bunch of statistics with. Happily, we can now confirm there is a direct correlation between us running a massive cover preview and the next month's votes. So it is that even as C&C Generals enjoys its third consecutive month at #1, Rome: Total War shoots out of pretty much nowhere into second place. And why not? This is probably the sweetest looking military strategy game yet, with thousands of 3D troops on the 32km x 32km battlefields. We want it now!

Next in line we see Freelancer has made a powerful surge up the list from last month's showing at #8. This is probably as a result of numerous Beta reports popping up all over the Net which indicate that the game is nearly here, at long long last. Take a look at our own report on page 44. Tasty? My friend, until you play Freelancer, you don't know what tasty is.

Passing over AMW oldtimers Doom 3 and Unreal 2 (and was it just me or was the Unreal 2 trailer just not that impressive?) we come to the battle of the MMORPGs. Sims Online has thankfully overtaken Star Wars Galaxies, thankfully because this is a game that's definitely going to be released here, unlike Galaxies which is still somewhat up in the air. In any case, the Sims is imminent (or should that be 'are' imminent?) while Galaxies probably won't even arrive until November. Sigh.

Finally the bottom three positions are taken up by a previous shower - Splinter Cell - and two new entries in the form of Vietcong and IGI2. Both of these can be attributed to recent multiplayer demos released on the Internet. We included the Vietcong demo last month, and this month we've got the IGI2 singleplayer demo for you to try out and decided whether or not this stealth-shooter deserves to move up a few spaces.

Enough chatter, examine the list, be outraged, and vote! It's the most powerful form of voting!

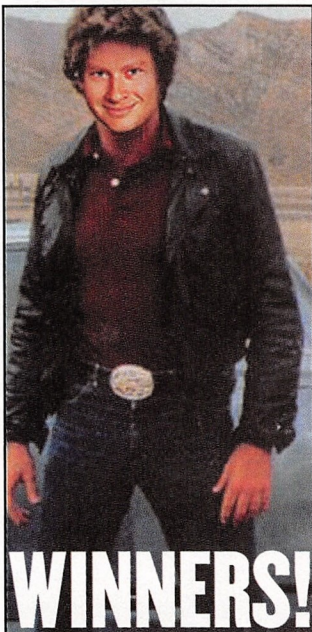


2: ROME: TOTAL WAR

PAUL NOONE MUST LIVE FOREVER

To win one of three copies of No One Lives Forever 2, we asked our readers what would happen to the world if PCPP disc producer Paul Noone was to live forever.

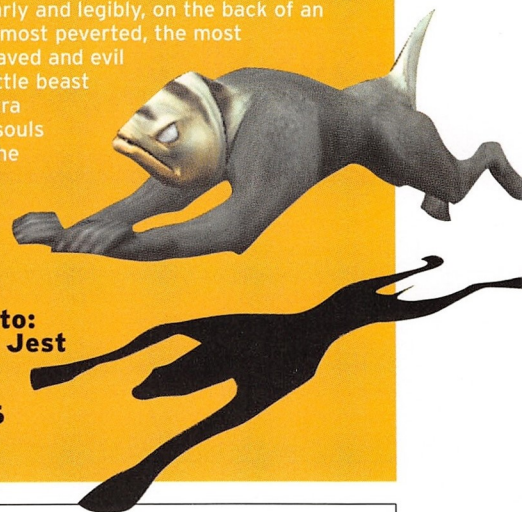
The range of entries was wide and vast, and curiously not a single one indicated that Paul's immortality would result in world peace, enlightenment or easing of the human condition. Mostly, an immortal Paul meant a world in pain, a world torn by war, or in the case of **Tom Howe from Murray Bridge SA**, a world in which the Sun had collapsed into a Black Hole, Paul was the first man on Mars, had hundreds of statues built for him, but no one (get it) remembered who he actually was! Ha! Our second winner, **Kym Hirst of Eimeo QLD** won our hearts with the simple line: "Centuries from now, mass enslavement." What more do we need to know? Finally, **Eric McCowan of Carnegie VIC** crafted a fine Matrix-parody, which Paul Noone was the Matrix, and the evil rebels were represented by teachers, librarians and nasty parents who wouldn't let their kids play computer games all night long. Hmm... still, games for all! Well done!



IMPOSSIBLE CREATURES 3 TO BE WON!

Do you have a the perverted mind of a scientific genius? Would you show no qualms when forcing innocent fluffy creatures to mate with each other and produce grotesque offspring hell-bent on taking over the world? Then Impossible Creatures is clearly a game designed with you in mind! So all you have to do in order to win a copy is write, clearly and legibly, on the back of an envelope the name of the most perverted, the most despicable, the most depraved and evil genetically engineered battle beast you can come up with. Extra points awarded for those souls savvy enough to include the names of this country's great leaders. An explanation of what the hell the thing is would also be welcome.

Send your entries to:
Nature's Cruellest Jest
C/- PC PowerPlay
78 Renwick St
Redfern NSW 2016



AWESOME MICROSOFT WIRELESS DESKTOPS! 2 TO BE WON!



The pen is mightier than the sword. That is, until the pen runs out. But what if the pen never ran out? What if the pen was in fact a keyboard, and it attached to your computer not through the dull workaday medium of wires but through the exciting go-ahead 21st century magic of wireless technology?

Welcome to Microsoft's Wireless Optical Desktop. It's the funkiest selection of wireless keyboard/mouse combos that ever sailed the infinite delta streams of future probability, and not only is the keyboard built with that famous Microsoft attention to detail and quality, it even looks swank. Black and silver! And did we mention it was wireless?

We have two of these keyboards to give away. The Wireless Optical Desktop has a standard key layout plus extra functionality on the F keys. The Wireless Optical Desktop uses Microsoft's patented ergonomic key layout that looks so amazingly Matrix and space-age and, if you actually learn how to use it, increases your per word speed and reduces fatigue. That's what the Editor of this fine mag reckons anyway, and he went ergonomic years ago.

So you must choose! Choose which keyboard you'd like to own, and enter the competition accordingly!

1. If you want the standard board, please explain in 50 words why wireless is the ultimate must-have technology of the new millennia. References to porn in the bath will receive extra points, at least until the joke stops being funny.

2. If you want the ergonomic board, write on the back of an envelope your vision for an ergonomic version of an ordinary household item that you see as currently not nearly ergonomic enough. Please note that we will consider 'the toilet' as too obvious. To make the love go further, you can only win one of the boards, even if you send in multiple entries for both. Remember, even as you post your entry, that both boards come with a Microsoft Intellimouse Optical, also coloured black and silver, which was created partly to reduce wires and thus desktop clutter, but mostly so you can hurl it in a deadly trajectory at your best mate/sibling/life partner when they thrash you at Quake, secure in the knowledge that it won't just snap back on the end of its cord and hit you in the face.

Wireless Optical Desktop. It's good for you.

Send entries to:
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COMING SOON

MARCH

2003

1503 AD New World (EA)	06/03/03
AquaNox: Revelation (Red Ant)	01/03/03
Bounty Hunter: Mace Griffin (EA)	07/03/03
CSI: Crime Scene Investigation (Ubi Soft)	18/03/03
DeltaForce: Black Hawk Down (EA)	27/03/03
Devastation (tba)	01/03/03
Freedom: Battle For Liberty (EA)	14/03/03
Freelancer (Microsoft)	13/03/03
Ghost Master (Vivendi)	27/03/03
Lock On (Ubi Soft)	06/03/03
Medieval: Viking Invasion (Activision)	13/03/03
NWN: Shadows of Undrentide (Infogrames)	25/03/03
Planetside (Ubi Soft)	13/03/03
Praetorians (Infogrames)	01/03/03
SWAT: Urban Justice (Vivendi)	14/03/03

APRIL

2003

Duke Nukem Forever (Take2)	14/04/03 (HA!)
DX2: The Invisible War (Infogrames)	28/04/03
Etherlords 2 (Fishtank)	08/04/03
Jurassic Park: Project Genesis (Vivendi)	14/04/03
Lionheart (Interplay)	07/04/03
Republic: The Revolution (Infogrames)	28/04/03
Tropico 2: Pirate Cove (Take2)	18/04/03
Star Wars Galaxies (Activision)	15/04/03

MAY

2003

Crusader Kings (Strategy First)	06/05/03
Enter the Matrix (Infogrames)	15/05/03
Hidden & Dangerous 2 (Infogrames)	01/05/03
CS: Condition Zero (Vivendi)	01/05/03
Starsky and Hutch (Vivendi)	01/05/03
Star Trek Elite Force 2 (Activision)	20/05/03
Warlords VI (Ubi Soft)	01/05/03
XII (Ubi Soft)	04/05/03



Timothy C Best



Even if you plan to write a game with your own engine, learning to use someone else's can't hurt

About four and half years ago I was wrapping up an interview with Auran head honcho Greg Lane and I slipped in one of the soft questions you like to add as you pack up your crayons:

"So Greg, what advice would you give kiddies wanting to get into the biz?"

Lane's reply to my question was ominous, "Do it quick!" he said.

The market was coming to expect more and more from games, and garage developers were beginning to be like the white rhino: an endangered curiosity likely to run a couple of miles and then die of a heart attack. "I think the days of the 'garage' start are numbered."

A new hope

Well, time changes everything and time - being a contrary little personified concept - does some pretty whimsical things. If you have dreams of making games and even a touch of passion you could do a lot worse than right now. I'd go as far as saying that some stars are aligned somewhere, doing something good.

Just the other day, I even tried to convince my housemate to program a game while I did the art and storyline. My hopes went down in flames when a precognitive vision hit him. In it, I was pulling the old, "I know what it looks like, but it's actually harder than it looks" routine as I was scribbling character portraits based on the supermodels from www.wonderfulgirls.com. He was chained to a C compiler. It's such a pity he knows me so well, otherwise we could have given everyone a run for their money at the "Next Year's Game" competition.

If you're even vaguely interested in dabbling check out this comp. It's being run by game developer Auran and has prizes worth \$100,000. The really sweet part of this competition isn't the big honey pot or the possibility for glory. The real selling point is the non-commercial license for Auran Jet that Auran will send you for free. All you need is some half-decent game idea scrawled on the entry form.

Jet-setter

It's a free games engine with full documentation as well as the source code for a little hover car racing game so you can look inside to see how everything works. Even if you plan to write a game with your own engine, learning to use someone else's can't hurt - not in this day and age of brutal development cycles and steep programming requirements.

If You Got Game, Bring it.



Let's say you don't win the prize - you've still had several months tooling around with a complete development engine. At the worst you can always spend the \$230 on a non-commercial license to continue the project. If you then want to go for the pro league Auran has case-by-case negotiation for commercial licences including royalty deals to offset upfront costs.

You can check out www.nextyearsgame.com for all of the details.

You might be a) wondering about Auran's motives, or b) wondering how good an engine selling for a couple of hundred bucks can be. Well, I suspect it takes grand promises about "industry development" to get State funding running into seven digits.

Three-legged race?

A \$5 million engine with community service ties sounds beautiful to me. Sure, you'll still have to code like a caffeinated freak with finals around the corner. Sure, you'll somehow have to get your hands on 3D Studio Max or Maya - but having an engine with bells and whistles like advanced particle, lighting and bump mapping effects as well as pre-coded interface support, physics and collision detection knocks down at least the middle 90-metres-worth of hurdles.

It also means that once you're off and running you can concentrate on the fun stuff like unique features and art assets (not to mention the supermodel justification and integration).

You don't have to make Battle Cruiser 2000, you can just fool around. If you are serious, then you might even be able to snow the government into giving you money to do what you love.

At the Australian Game Developers Conference it was announced that the City of Melbourne is sponsoring an incubator program to help up-and-coming developers. The city better known for its cafes has actually started to crow that its games companies employ 300 people and brought in \$30 million in exports last year.

Melbourne is also launching a feasibility study into a motion capture studio to compliment its game and film industries. Governments are starting not only to realise the money in games but they are starting to do something about it.

Leg-up

The fact that Next Year's Game is even being held says good things about the state of play. For new developers it's the equivalent of grabbing water from the bottom of the industry pool, firing up the test kit, and finding it's PH balanced and the chlorine won't eat your face off. It's time to jump in. Now, if you'd tested the waters a couple of years back you'd probably have gotten a very different reading.

I'm not sure how much of the feeling filtered outside of the industry, but around the turn of the millennium there was almost a despair haunting the PC industry - like that feeling you get sleeping in Sunday morning knowing you have to start super early Monday. Big games occasionally crept out but the industry was a dull grey and publishers were as skittish as a horse making a stormy ferry crossing in a horror movie.

People were being converted to consoles by a better range of games produced by Sony's masterful handling of the PSX and then PS2. Windows crashing 20 times more often than consoles - and being 20 times harder to fix afterwards - didn't help much; nor did the fact that publishers saw PC gaming as Software Pirate Central. All of this was felt keenly in Australia with

Oz development studios turning from big razzle-dazzle titles to do bread and butter work.

It might just be my journalistic cynicism finally having a good hard look at itself and disappearing in a puff of sarcasm, but things seem to be on the up. If you scour the hiring boards of the Aussie studios you'll see feelers going out for expansion. We weathered the launches of the super consoles and in their wake people realised that PCs will always do some things better.

Take it to 'em!

Next-gen consoles, especially the Xbox, also brought on a convergence of games, in both complexity and audience, closing the gap between PC and console development and making it easier than ever to switch between the two. Think about it: Halo could almost have originally been developed for PC.

Heavens above, even Windows is crashing less!

All I'm saying is that I'm going to keep at my friend to get into the game with me - when you see gothic battle mechs looking strangely like Laetitia Casta, Kelly Hu and Alyssa Milano striding your flatscreen you'll know I managed to talk him around.



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The Guerrilla Gamer



On the 13th of December 1973 a bearded French loony named Rael hit his head on the roof of his car as it sped over a pothole and suddenly realised aliens had come to tell him about the meaning of life, the universe and everything. He stepped out onto the road to wind up his Peugeot and was met by a small, also bearded, alien (the French don't take anyone seriously unless they have a beard, or a poodle under their arm. If you have both a beard and a poodle you're considered a national icon and immediately given an arts grant and a small loft apartment on the left bank. It's true, ask anyone.)

The alien, apparently, explained to Rael that his ancestors had created mankind as a kind of science project. Now they were returning to conduct a range of important scientific experiments such as seeing how many Mike Munroe's you can stuff down an elephant's neck before it vomits. Apparently they had been here before, making contact with other important people like Rael (an extremely influential member of FAMPLA, the French/American Man Poodle Love Association).

Beards!

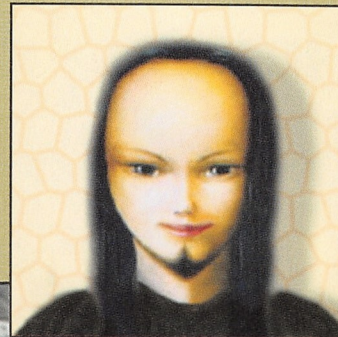
Throughout the ages bearded aliens have apparently been there to guide humanity. When the Nazis needed to know the perfect basting temperature for a Jewish housewife the Raelians were there with the appropriate cook book. When Cortez almost got lost on the way to destroying the New World the aliens appeared just in time with an Atlas. And when the Egyptian Pharaohs needed a way to build their Pyramids our alien benefactors were there and only too happy to show them the benefits of a well whipped work force. Indeed at every turn in our development those kind and extremely patient aliens have been there to guide humanity towards an enlightened future. One of those futures where everyone wears flowing robes, a vacant expression, and lives in cute little bungalows. Like those 'alien' cultures you always see on Star Trek that remind you of some encounter group for washed up advertising executives.

Relevancy check?

What the hell do believers in alien 'Gods' have to do with the games biz? More than you might think. The world's most recent encounter with the Raelians has been with their public announcements concerning the first cloning of a human being. As you know the world's scientific community was quick in its denunciation of these claims, but what has really been going on?

We've all been taught to believe that cloning humans is a very difficult thing to do, but is it?

MAN POODLE LOVE



The Iraqis, not particularly known for their advanced DNA research, are using cloning to thwart America's plans to eliminate Saddam Hussein. The picture here shows some of these clones enjoying a scuba diving holiday in Townsville, so where the hell did they come from? Are the Raelians helping Saddam in exchange for some future benefit? Perhaps their spaceships run on unleaded?

Alpha Code

So why the 'announcement' about the 'first' human clones? They don't want to alarm us of course. Take a good hard look at the illustration of the Raelian alien, as seen by Rael himself. Remind you of anyone? Long, lank and dark hair, scraggly goatee, ghoulish jaundiced skin and black tee shirt? Yes you're right, it's practically every IT backroom staffer you've ever met, and every help desk phone operator, PC sales assistant, technical support officer, trouble shooter and systems analyst. Yes, the hairs are starting to stand up now aren't they?

Is the world about to be overrun by cloned Raelians from outer space? It already is! Who are they and what do they want? These excerpts from their official manifesto <http://www.rael.org/int/english/index.html> gives us a hint:

"There is no soul in us. There is a biological program, comparable to computer instructions, which make us human and capable to enact rules of society"

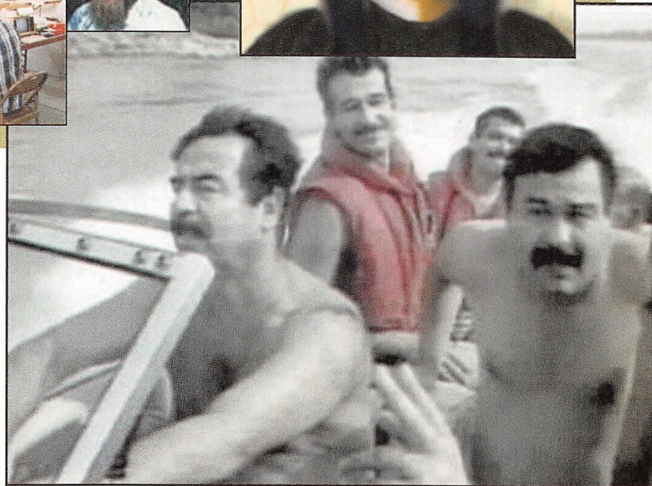
And this:

"The first humans, our ancestors, were created scientifically by voluntary genetic manipulations, desired by humans from another planet"

In other words, according to the Raelians, we're all just part of one big beta test! Douglas Adams apparently wasn't too far wide of the mark when he proposed that the Earth is a giant computer commissioned by mice. In our case it was a bunch of disgruntled space humans who approached the Raelian aliens at some intergalactic self improvement and weight loss convention, offering them a few green skinned space bunnies in exchange for new bodies and a new world.

Grim future

Obviously something has gone wrong with the deal and the Raelians have returned to infiltrate their creation for some serious QA and bug hunting. And what better way to do it than in the



form of the various echelons of computer enthusiasts and support staff? Why do you think they always ask amazingly insightful questions like is your PC is plugged in? Do you have Windows installed? Is your monitor is in the same room as your PC? These questions aren't designed to actually help you; it's their way of debugging the system, the meaning of your response determines the health of the overall system.

In other words what you say to these people is very important, if they think the system is to far gone they might just wipe it all clean and start again. So with an understanding of the Raelian plans in mind here are some suggested safe responses to prevent the human race from being cold booted into oblivion:

Q: "Do you have the latest drivers installed for your graphics card?"

A: "No, my spiritual beliefs prevent me from imposing a new set of guidelines on my PC in a non-inclusive, dictatorial manner."

Q: "Have you tried reinstalling the software?"

A: "Repeating the mistakes of the past is a luxury we can no longer afford if we are to free our minds and bodies of their earthly shackles and take our place in the heavens."

All we have to do is repeat a few platitudes like this until they've all gone back to wherever it is and we'll be fine.

By the way, 21st century Raelians are in no way to be confused with 20th century Raelians who all committed suicide at the end of the millennium and were taken away in a flying cigar shaped object last seen heading for Bermuda.

The Guerrilla gamer has clearly been in this business too long, since he now appears even more insane than the crazy cult guys that appear in this article - no mean achievement. His fingernails have in fact grown so long he can use them to pick up weak space signals from the Crab Nebula, and invest accordingly. We wish him the best, and visit him regularly on weekends in the institution.

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KEEP OUR MUSIC FREE

Stuart Calvin



The Business Software Alliance and Software & Information Industry Association calculated that a total of a USD\$11 billion revenue was lost to software piracy worldwide in 1998. Figures for 2002 are going to be alarming indeed.

The Interactive Digital Software Association estimated that the piracy of packaged entertainment software last year amounted to over USD\$3.2 billion worldwide for the software gaming industry alone - whoops! Nearly any song you desire can be downloaded from the Internet as MP3s and WAVs or even entire albums in ISO format and I suspect that the damage this does to the music industry can't be quantified without new superlatives.

Pirate kings

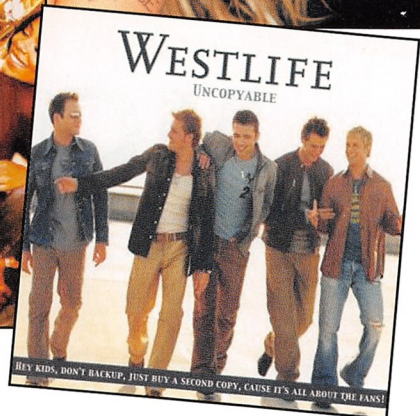
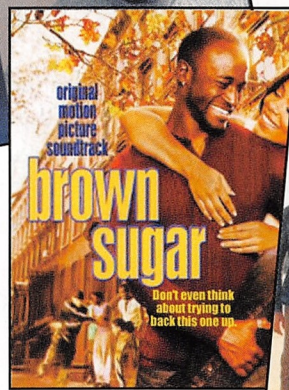
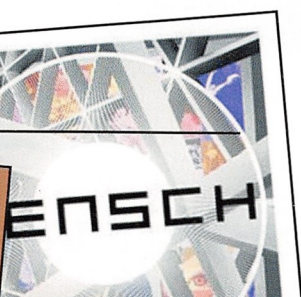
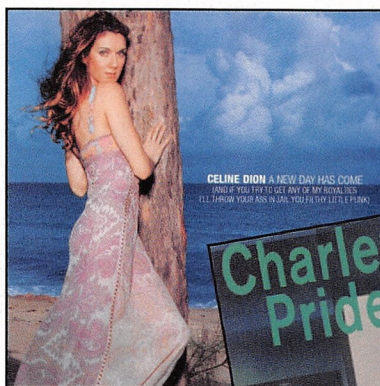
Most CD-ROM software piracy is currently attributable to counterfeiting by professional pirates. But the entire digital information/entertainment industry overall is now confronting two mature threats: casual copying using consumer CD-recordable drives and unauthorised Internet downloads. I've got to add that leeching at the ever increasing number of LAN fests doesn't help either. I'm not a piracy wowsler but even my simple mind can sense imminent drastic action by the game developers and sympathetic government regulators should the problem worsen. Alan Fel's recent win against Sony cheered my soul but there is another emergent issue to face, possibly this year.

I don't know about you but I rather like the idea of backing up those expensive music albums

Audio copy protection

In Australia and New Zealand we are very fortunate that there is no widespread use of audio copy protection. In a nutshell, none of these protected CDs meet the Red Book specifications for audio CDs, so they may not display the "CD-DA" logo. Many drives do not even recognise these discs, so that ripping is impossible for some. Some other drives completely hang and require a reboot in order to get the disc out of the drive. The only music currently sold in Australia with copy protection, that I know of and own, is Westlife's World Of Our Own album with Cactus Data Shield 100. There are two others rumoured to be protected but my testing showed this not to be the case.

While I have a 2001 protection version, improvements to CDS100 are continually made by Israel's Midbar Tech Ltd. CDS100 v3 remains the choice for popular albums. Even some Plextor drives with "single session only" enabled cannot read these CDs and unfortunately neither can any Lite-On



drive. The only guarantee is that they'll play in a dedicated compact disc player. Although many popular programs (CloneCD, Feurio, EAC, cdda2wav, ISO Buster) are able to see the tracks, it is not possible to read anything. I say that we're fortunate because a wide range of copy protected Compact Discs that are simply unplayable on a PC and some set top DVD players are not here just yet.

My CDs are cactus

Cactus Data Shield protected discs contain not only a bad Table Of Contents, but also plenty of errors, which can cause audible clicks on many drives. The intention was that dedicated CD players would not produce these clicks, but inevitably some players do not play them back well at all. Key2Audio protected discs, courtesy of Sony, can't be ripped if Auto Insert Notification is turned on. Most optical units can't read these CDs anyway. Given the right device though, you disable AIN, reboot and fire up the ripper of your choice and away you go.

Doc.lok v1/2 is a very difficult protection and even some Plextor drives, which are otherwise known for reading most protected audio discs, cannot recognise Doc.lok v1/2 protected CDs. This protection also employs weird TOC manipulations, in order to confuse drives and prevent them from recognising Doc.lok protected CDs. My Doc.lok v1/2 disc is called Helium Vola (Euro trash). Interestingly, the Lite-On LTR-48125W (firmware VS08) does not recognise this disc but this issue does not arise with the new LTR-52246S. Even more interesting is that Lite-On has released firmware ZS0P for the LTR-40125S, which also adds support for reading of Key2Audio, Doc.lok and Cactus 200 now.

The Horror

If you're interested in this field then you'll need albums like Shakira - Laundry Service, protected with Key2Audio v2 or Celine Dion - A New Day Has Come, protected with v3 (Yaaaagh! - Ed). Yarin - Hitzone 21 is protected by Doc.lok v3. Groenemeyer: Mensch, (more Euro trash) is protected with CDS200. Peter Maffay - Tabaluga und das verschenkte Gluck, is protected with the undefeated CDS100 v3. Make sure you order from a European on-line distributor rather than risk obtaining an unprotected version from an

Australian source. I don't know about you but I rather like the idea ripping MP3 compilations and backing up those expensive music albums. I really don't want the problems that most of Europe and Asia are experiencing.

Star Force Go!

The StarForce copy protection (for data, mostly games) is now up to Professional Version 3.0 and it is found on nearly every game title in larger Asia. It cannot be beaten by copy software. Understand that StarForce protected software is not 100% compatible; if you're one of the incompatible 1 or 2%, they don't care. We don't want this 'protection' reaching our homes. I'm testing an Alcohol 120% Beta (v1.3.7.1231) that's added a StarForce 1.x/2.x profile. In fact you can use this profile to dump SF 3.x discs, but there are many restrictions to run SF3.x with RMPS or in virtual devices.

So what does "RMPS" mean? Well basically it means Recordable Media Physical Signature. What this means to us is that Alcohol will burn an image as-is to CD-R, based on the physical characteristics of a disc, that otherwise cannot be burned onto CD-R/RW. The object of this new feature is to be able to backup games to CD-R/RW that presently Alcohol can only emulate from the hard drive. Lucky we don't need this, eh?

All of this non-compliant audio hocus-pocus and emergent bulletproof copy protection will make its way to our shores. Unless, that is, all of the interested parties including the Federal government and its watch-dog agencies, the entertainment industry executives and software developers get their heads around all of the issues. Is there room and a role for a game-players confederation? You betcha and I just hope we all realise it. ■

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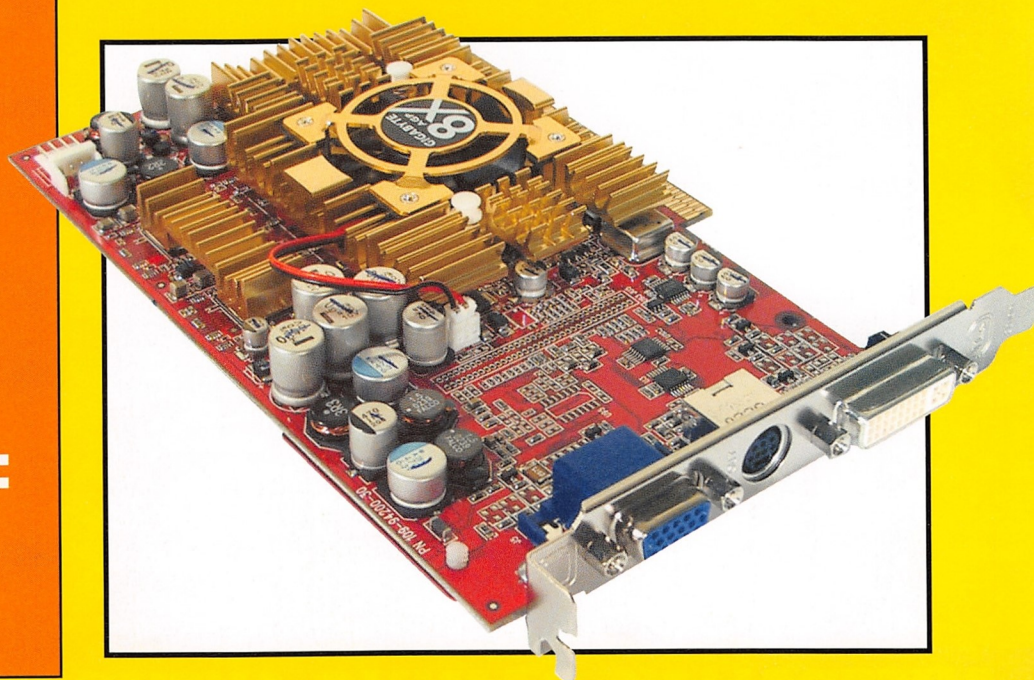
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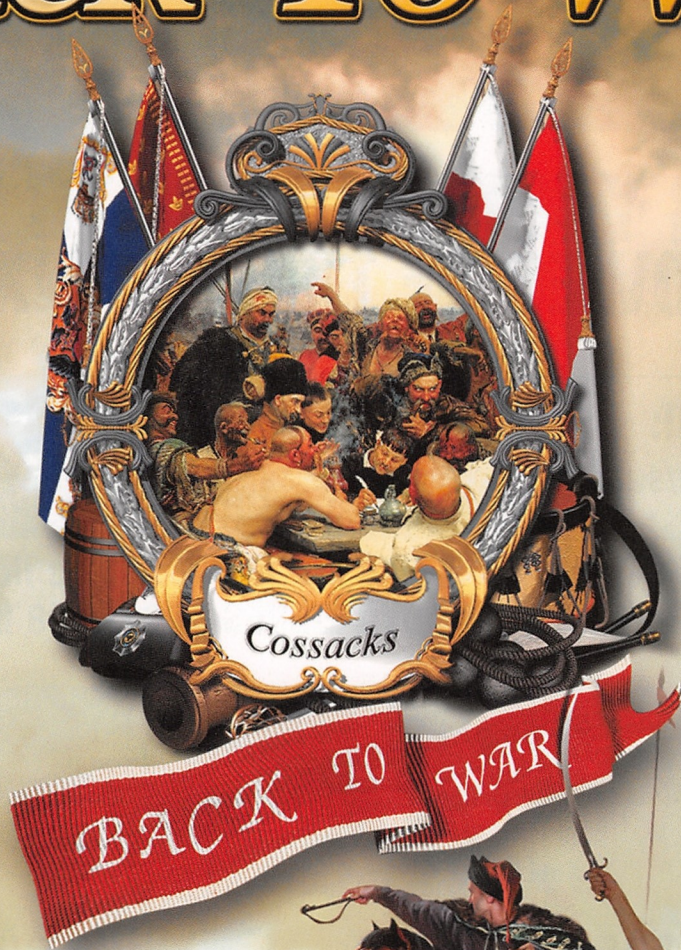
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Cossacks: Back To War



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To stand alone in war is extremely unpleasant. Extremely pleasant, on the other hand, is the stand-alone version Cossacks: Back to War.

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This add-on contains 100 captivating missions taking place between the 16th and 18th centuries.

In addition, two new nations, Switzerland and Hungary, are included. These countries waged war in the late Middle Ages and essentially influenced the development of European military strategies. This addition causes the second add-on of Cossacks to pass the threshold of allowed gaming fun.

Stand-alone game, does not require the original Cossacks to function.

Features

- Thrilling real-time strategy game with historical back ground
- 20 nations to command
- Europe between the 16th and 18th centuries
- Stand-alone game, other Cossacks games not required to play
- 101 new single missions
- 2 new nations: Switzerland and Hungary with a total of 8 new units
- Spectacular real-time battles with up to 8,000 units
- 4 different difficulty levels
- 3D landscapes offer strategic advantages
- 1 new camel riding unit for Algeria and Turkey: Bedouin
- New Automatic Championship System (ACS) charts online competition on the web
- 20 new building types for Switzerland and Hungary
- Extra: Mod with an additional 30 units and 3 cannons
- Special VIZOR features allows players to watch online games



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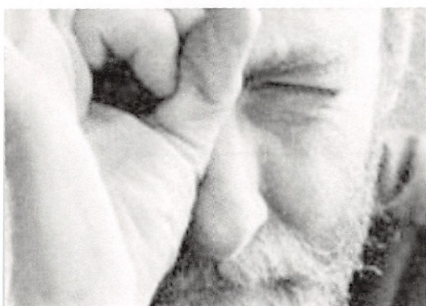
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IN PREVIEW

THEY GIVE US THE CODE, WE GIVE YOU THE LOWDOWN

GAMES



Another month, another pre-release look at Freelancer. That's right folks, it's the most previewed game in PCPP history, appearing in our pages no less than six times. But this time is the last we swear! Or at least, the second last because we'll still have to do the review. But this final, final preview is based on an actual Beta build of the game, so you can rest assure that what we played this time is actually what's going to end up in the box, at least more or less.

The really big news this month though is the announcement of the expansion

pack for Warcraft 3. In typical Blizzard style, it's a lot more than just a bunch of extra maps and a few multiplayer missions - there is heaps of new stuff this time around, including new spells, items, Heroes, units for each of the races and more! Our preview is pretty exhaustive, so your best bet is to just get your teeth into it.

This month we also welcome our new UK correspondent Derek Dela Fuente. He assures us he's 'been around' and given that both his submissions this month are detailed interviews with UK developers, who are we to doubt him? First up is another look at UFO: Aftermath which we gave the First Look treatment a few issues ago, and then it's on to chat with Republic lead designer (and child prodigy, apparently) Demis Hassabis.

As usual, the preview section seems filled with a sort of hope for PC gaming - seven big games, all worth your money, all promising to arrive within the next year. Sure, they all require a bit more deep thinking and intellectual horsepower than the latest GTA-flavoured PS2 blockbuster, but I think that's what makes PC gaming great. The PC is where you turn if you're really serious about gaming.

To further reinforce this point, just look at Vietcong. Here's a game that could have been a tacky Rambo licensed shooter, but in the land of PC everything is given an extra sort of legitimacy, and now Czech developers Pteradon are attempting a deep and respectful recreation of one of the, shall we say, messier wars of the modern era.

Yes, it's time to be excited once again. Great games, great days ahead, and the promise of Counter-Strike 1.6 to keep us salivating! Onward!

Justin Hoffman
letters@pcpowerplay.com.au



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Delta Force: Black Hawk Down

THE TALKING HEADS:

Wes Eckhart: Producer
Worked at Novalogic for 8 years and produced all Delta Force titles.

Chris Tamburrino: Art Manager
Worked at Novalogic for 5 years and exclusively on Delta Force titles.

Gwen Ballantyne: Creative Level Designer
This is Gwen's first game. She used to work for Disney and Universal Studios designing theme park attractions.

PCPP: So why a game about Blackhawk Down?

Wes: For a long time we have been making the Delta Force games, and while we have always tried to based the missions on reality, we have never really gone for a factual approach. This is because until Blackhawk Down you never really got to hear a lot about what the

Interview with the Novalogic Team

The movie of the same name was an adrenalin charged roller coaster ride from start to finish and the game is looking pretty exciting too. Steve Polak spoke to the developers at Novalogic and got all the essential early-warning intel on the first digital recreation of Mogadishu.

Delta Force operatives do, and so it was hard to come up with something based on an event. In this case though there is enough information around to go for a factual approach, which we are very happy with. The release of the book and the movie did a lot to raise the knowledge of these special forces groups. We thought that since it had been ten years since the event in Somalia we felt we could tell the story in a gamespace while being sensitive about those who were involved. So we aren't looking to have a similar controversy to that which sprang up around Hitman.

PCPP: Obviously being politically sensitive is important?

Chris: We won't have actual soldier names and civilian casualties

either. Identifying the bad guys is a challenge as they don't wear obvious uniforms. Both the book and the movie go back before the Blackhawk Down era and the intervention of the Rangers and Delta Force operatives and we start the game with the 10th Mountain division who were involved in operation Restore Hope which was intended to break the famine in Somalia by supporting the UN forces.

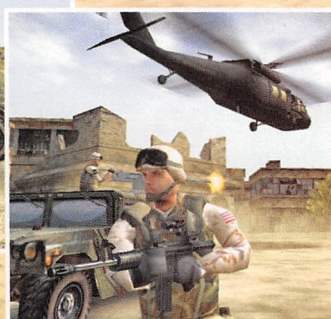
PCPP: So it was a matter of setting a context for the later missions?

Wes: Yes, that helped us to show that the Blackhawk Down era wasn't so much about vigilantes, but that the warlords had to be removed as they were causing

a lot of death and suffering for the rest of the population and as such were hampering the efforts of the UN to help stop the famine. We are sensitive to the need to not be gratuitous, so when people are shot there is a small puff of blood and there are also medivac support troops so that the fact that a fellow troop gets shot isn't trivialised.

PCPP: How will you structure the game to take into account the different troop types you play?

Wes: We take you through 3 different stages. There is the 10th Mountain division, then you join the Rangers,



who are tasked with taking out the warlords who are hampering the UN. Finally we make you a Delta Force operative. The difference between the two latter groups are that the Rangers dealt with transportation and security and the Deltas were the hit and grab guys. You get to see all three kinds of mission types during the course of the game.

PCPP: So how hard was it to recreate the gritty urban slums of Mogadishu for the game?

Chris: Indeed creating the slums of Mogadishu was a real challenge. The buildings and dirty nature of the city actually took a lot of work. We'd finish an area and make it pretty grubby and speak to our advisors and they'd ask us to make it dirtier again, and this kept happening, as we had two advisors who helped us with the game who were there during the period as Rangers. They were enormously helpful. Getting the large numbers of people in the city areas running at a good frame rate was very hard too.

You get a feeling for literally hundreds of

people and certainly see more than you would expect in this sort of game onscreen, literally dozens.

Wes: We also made some lovely rural areas and the grass which we have had to remove from previous games is back. The swamp levels are particularly nice too.

PCPP: Did you do a lot of research?

Chris: In the early process of developing this game Wes and I went out to March Air Force Base and had a look at a huge amount of declassified Department of Defence video footage. We combed through this and found lots of good stuff. We picked that tape apart for different details. One of the things which really surprised us was the predominance of Italian architecture and we found that the area had been an Italian resort which gave the area and our play environments a really unique feel. The city was a slum built on a ruin which makes for some great visuals.

PCPP: So how close is the movie to what really happened?

Wes: We found the book was about 80% correct looking at what happened, and the movie was about 80% true to the book so there is a process of dilution there, but we aren't making our game based on the movie. The book and our own research is much more important.

PCPP: So no Eric Bana then?

Wes: No. In terms of what is different in the movie the

game covers a lot more what happens before and after the film. There are some nice set piece battles, but one area where we have strayed from reality is that the truth is that there wasn't that much fighting during the overall operation. Apart from the Blackhawk Down mission there were only sporadic conflicts which were barely worth mentioning and certainly wouldn't have made for a good game. In order to redress this imbalance there is more gunplay, as a truly historical accurate portrayal of the operation would have been quite dull so we had to put more shooting in it. You have to have that in a firstperson shooter funnily enough, so while it isn't realistic it does make for better gameplay.

PCPP: How else have you changed the game to make it better even if it is unrealistic?

Wes: The truth was that many of the missions didn't see a single shot fired as the Delta Force guys are so highly trained and so good at disarming enemies that the local militia were often caught totally unable to respond. Our advisors from the conflict have told us that the militia were often just standing there dazed and their guns had to be ripped from their hands by the Delta guys as the surprise was so complete and the assault was so totally effective. The fact that a lot of these militia were also very high on the local drugs accentuated this too.

PCPP: Are there stealth elements? These would seem a natural part of a Delta Force mission.

Gwen: Operators have certain ways of approaching things. Using flash-bangs in a room takedown or using suppressed fire are rewarded and these more stealth oriented approaches (which differ to shooting every enemy you see) are rewarded as you aren't being chased by so many hostile forces, so stealth elements make it into the game this way. You don't have to use a stealth approach, but you are rewarded. There are also night vision goggles which help you sneak up on people you have to surprise.

Wes: There is also a mission where you have to take out a generator to render harmless a local radio station and this mission is set at night. This mission is closely based on something the troops really did. You have to sneak into a heavily controlled patrolled enemy area, and going in quiet is great, but once you have alerted the locals to what is going on by blowing up your target then all hell breaks loose and there will be lots of air support with 'Little Bird' helicopter gunships and many hostiles running all over the place. This mission is one of our most exciting and the transition from quiet to chaos is really exciting.

PCPP: So do you get the ball rolling by calling in the choppers?

AI CHANGES

The AI will be significantly changed in the game when compared to the other Delta Force games. As Wes says; "Our AI has never been the greatest on the block but this time around we have worked hard to get the scripted elements in the game working with flexibility and with the squad based approach there has been a need to have your troops adapt to any given situation. We have done a lot to make this something which looks like it is happening naturally. In room takedowns for example you will have a set group of orders. You will be able to tell your guys to clear a hallway, stay clear or use a flash bang. Once you give this simple command you want it to work and look right. You don't want your team-mates crowding around and getting stuck as they bump into each other so we have done a lot to make sure that sort of thing won't happen. We want to avoid the situation where your squad mates are standing in a position blocking you and you wish they were dead as they are more of a hindrance than a help. We have spent a lot of time to make these guys an asset or if they can't be an asset they won't be detrimental. You won't be starting missions, killing off your team mates as they are better off not being there."





Wes: You can't call down air support. The strikes are pre planned as it needed to be this way for our mission scripting to work. They are great to watch though and add a lot to the gameplay.

PCPP: How have you dealt with issues like the fact that Delta Force guys tend to use their gun sights a lot even in close combat?

Wes: You will have a 'scope up' mode, which represents the gun being up. This is how the Delta Force guys tend to fire. They have more skill with a weapon and can get off accurate shots very quickly even when they bring the sight scope up to their face and sight it directly. They are really amazing to watch actually and you will be able to fire in scope up or scope down mode, with scope up being more accurate, but you lose some of your peripheral vision. We have an accuracy difference, but we are tweaking it so as not to make the gameplay annoying.

PCPP: Has this caused any problems?

Wes: Because you can snipe over very long ranges, accuracy penalties have to be factored into the need to take such long range shots, as they still

have to hit enemies at distance, so we are working on that balance right now. Again realism is important, but so is good gameplay.

Chris: Testing this is easy, take your gun and shoot at a wall in sighted and unsighted mode and you'll notice different effects with the bullet holes.

PCPP: Can players also take more direct control of the sighting system?

Wes: We have also customised your scope management system, so you can tweak it to take into account range issues and bullet trajectory. This takes into account gravity and you can tweak it yourself or we have an auto mode which doesn't require any adjustment. The auto mode works well although we are having to work on making it better so that you can better shoot at a moving target and not feel the auto aim is too intrusive.

PCPP: Taskforce Dagger was a real disappointment when compared to your other titles. How do you account for this and the fact that Blackhawk Down is looking really promising, implying a return to form for the series?

Wes: Well the game was the first time we outsourced the development

HULK GUNS

Even though Eric Bana isn't in the game, he did have an impact on its development in a strange way. When the Novalogic guys tried to get their hands on some guns from the armouries which supply weapons for movies and other productions, they found all of the guns they wanted had been grabbed the previous day by the Hulk production crew and so they had to wait for Eric and the lads to finish with them.





of a Delta Force game and we and the 3rd party developers, Zombie, learned a lot in this process. The game was developed using the Land Warrior engine and was developed two years after Land Warrior so it

suffered as a result.

Chris: You will find Blackhawk Down is a very different new beast.

PCPP: What have you done regarding that infamous aspect of the FPS location specific damage?

Chris: There are around sixteen hit locations on the body and these will have unique animations and there is a limp effect and other impact effects. In most cases there is not a lot of difference though. You won't see arms hanging off or left arm versus right arm accuracy drops. There is a bit of it in there, but not an obsessive amount. It isn't a high bang for buck item as far as we are concerned.

PCPP: What about the rules of engagement and targeting hostile units, do you have a 'bad guy interface metaphor'? Do they look different in any way?

Wes: We won't use a target metaphor. Generally if they pull a gun then you can assume they are an enemy. Funnily enough we were talking with our advisors about the rules of engagement issues as we wanted to get it right for the game and it isn't like you see it in the movies. There is none of that 'do not fire unless fired upon' stuff. Instead if anyone is a threat or a perceived threat you can shoot at them. In the real world in that environment if a guy is a carrying a gun and you can see him you can shoot him.

PCPP: Makes sense.

Wes: This presented some interesting design decisions for us as an unarmed person who is giving your position away, or the position of your squad mates, is logically deemed as a 'threat' and would be fired upon, and we can see instances in the game where this would makes sense to go this way. However we really didn't want to go too down the road of having the player

attack unarmed civilians in this sort of case, so there will be some balancing on this tricky issue. For example if you have a really good hiding place and a civilian walks up to you and is not a threat for doing this, but then begins pointing to you and shouting something like "they are hiding right here" then you know that is a bad guy. But other civilians aren't unless they do something which endangers your men.

PCPP: Indeed and relating this to the movie there are instances where you see little Somali kids with mobile phones reporting the details of incoming Ranger forces.

Naturally it would be very unwise to even experiment with the rules of engagement concept so that players are expected to fire on these scouts even if there is an argument for such an approach.

Wes: We aren't putting kids in the game, or anything like bad guys using women as human shields or any of that stuff. When you target a civilian there will be a big X which tells you they aren't hostile as we want to make it clear that it is just the militia you are after. In this sense we are more cut and dried than reality. This doesn't take all of the skill out of it either as you will still be challenged by situations when there are fifteen people running past and you have to shoot only the three or so bad guys and not hurt the civilians. It's one of the things that makes for good gameplay, figuring out who is who.

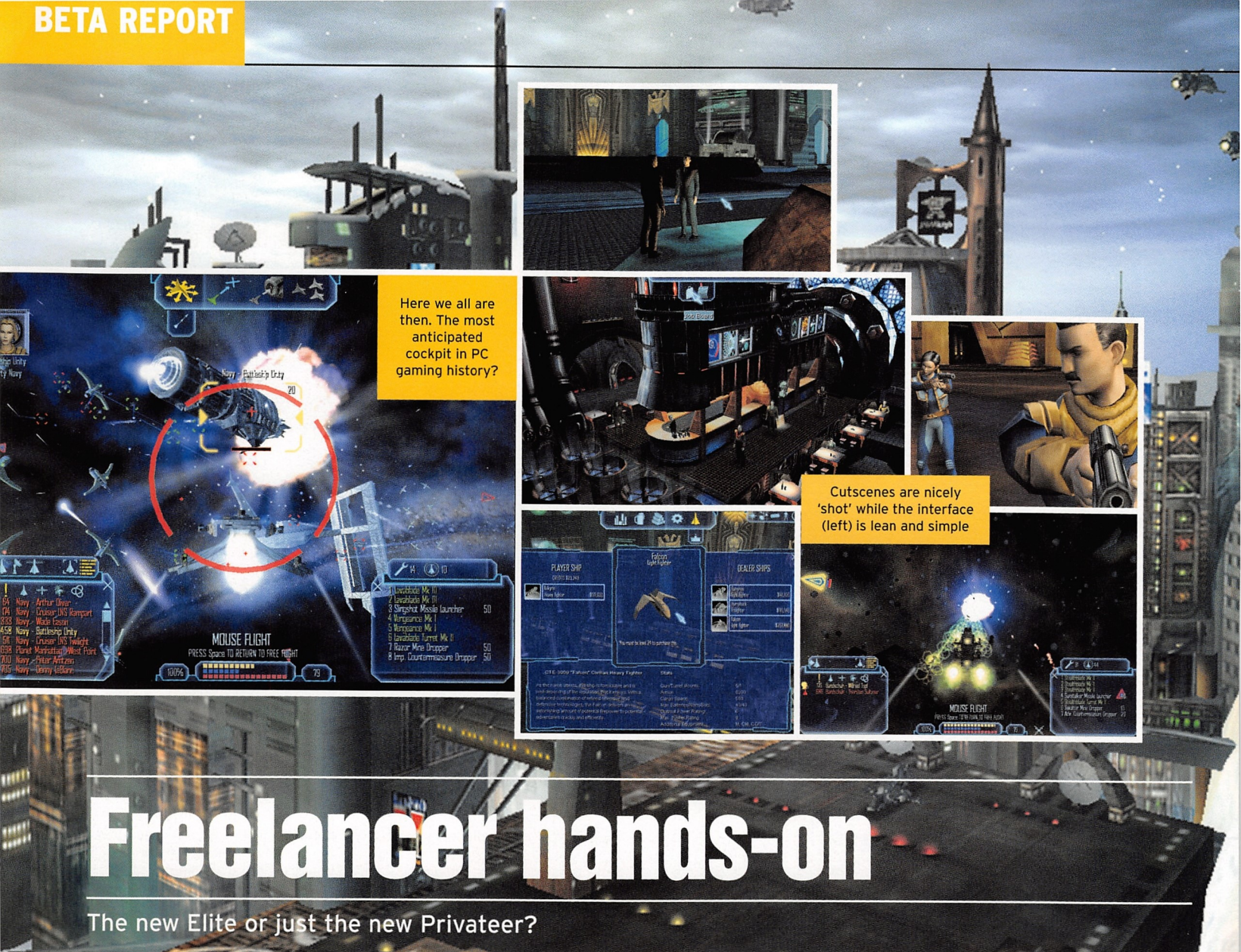
PCPP: Will there be any character development and skills which you can change as you are successful in the game?

Wes: No we are staying away from that.

PCPP: Well we certainly look forward to the game as it sounds hugely exciting!

I'M THE SUPERIOR DRUNK!

Unsurprisingly there are real differences in the way the different soldiers and militia fought during the conflict. The Delta Force guys would tend to operate in small groups and keep moving a lot, only taking down obvious threats. Getting to a specific target and dealing with them or kidnapping them or knocking them out is often the focus. The Rangers would have a more conventional approach setting up fire bases, working with heavier weapons like light personal artillery and squads which are larger in number. The objective being to clear and dominate an area so that other personnel could then operate there. All of this appears ridiculously organised when compared to human zoo that best described most militia during the conflict. Militia troops had possibly seen too many Hollywood movies as they often fired from the hip and were woefully inaccurate. Militia would also fire their weapons blindly around corners, waving their arms and spraying bullets everywhere. These guys were also often out of their minds on one drug or another and this tended to make them even less focused on the job at hand. When you bear this in mind it is astonishing that they managed to stay alive for long as friendly fire in most battles would have been horrendous. The drugs tended to make the militia think they were invincible so they'd fight in really stupid and dangerous ways. It is no surprise that as many as 1000 militia were killed for the loss of 18 US troops on the 3rd of October 1993, the day of the Blackhawk Down incident. The militia's haphazard approach to soldiering should be interesting and will be something which you will notice in the game.



Here we all are then. The most anticipated cockpit in PC gaming history?

Cutscenes are nicely 'shot' while the interface (left) is lean and simple

Freelancer hands-on

The new Elite or just the new Privateer?

Developer: Digital Anvil ■ Publisher: Microsoft ■ Distributor: Microsoft ■ Available: March

Our preview in PCPP#82 should have whipped up some new excitement for this long-overdue space sim, but now we have our hands on a press beta of the game and have actually played what is more or less a finished version of Chris Roberts' original vision.

The game has come a long way since the launch announcement in 1999, and as mentioned more than once, has changed project leaders, programming teams, even publishers. Microsoft now has the game under its capable wing, and in true Microsoft style, the press Beta was released as soon as 90% of the game was finished and working properly. What we've been playing this month lacks only a few lines of dialogue and some bug fixes, although we encountered no bug problems in our game time, so hopefully this phase of development won't take long.

Nuts and bolts

The game is due in March, and promises to herald a return to the golden age of space simulation - a freeform universe that can be explored in any direction, at any pace. Along with traditional elements, Freelancer also promises the player the opportunity to join missions already in space, dynamically, and to switch sides in the middle of a firefight. Woven

unobtrusively through the freeform action will be the main story of the game, featuring mysterious cigarette-smoking men in dodgy fur-lined jackets, lithe (female) Asiatic security force majors and, oddly enough, Gordon from Sesame Street (you'll see what I mean when you play it). So how does it all work?

After a slew of cutscenes using both pre-rendered and engine-driven visuals, the action opens on planet Manhattan in New York System. The player - a mercenary named Trent - has recently been rescued from an exploding space station and is waiting for a 'friend' of his to be released from intensive care so Trent can extract some money from him. With time on his hands, Trent hooks up with the Liberty Security Force on a routine patrol mission. Moments after launch, a Bretonian Cruiser (or Destroyer, or Battleship, it's not all that clear) arrives above Manhattan and is immediately shot to bits by torpedo bombers from The Order. Trent joins the fight, repels the invaders, wins the trust of the LSF, and then it's on to more scripted missions.

Fiddling around

The flight dynamic is a little unusual. As the previews warned, there is no joystick support in Freelancer, everything is

MISSIONS

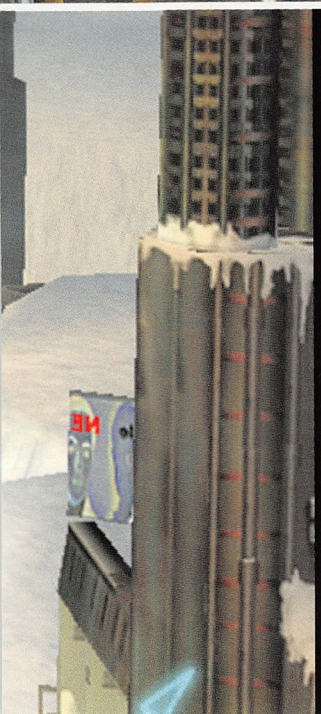
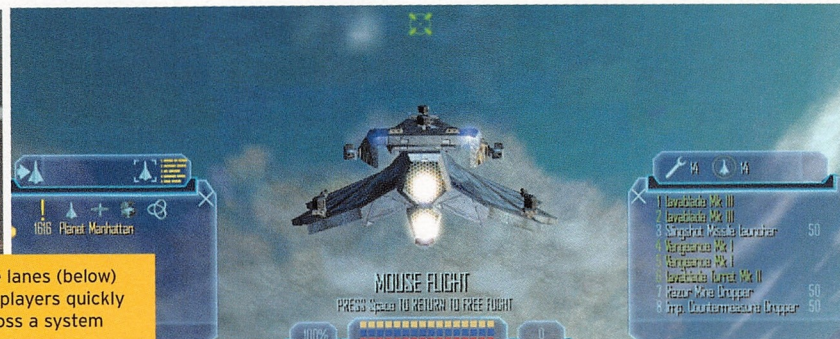


As mentioned, Freelancer appears to be using the Privateer model of mission generation. The missions are waypoint-based and mostly military in

nature - go to X and destroy Y. There are no missions that require trade or exploration, so the focus is very much on running and gunning. It is possible to join missions mid-flight, as there is a Hail button the HUD that forces friendly ships to explain their route and business to you. However, at this stage the dynamic changing of sides mid-mission doesn't work too well. The plot-driven missions that you MUST take at the beginning of the game turn the Rogue and Outcast factions into enemies, so if you try to help pirates by shooting up convoys, the convoy will become hostile and the pirates will stay hostile, making it everyone versus the player! What's more, shooting a peaceful convoy only a few times will turn most planets and bases hostile, making it impossible to land! Hopefully the opportunity to work for the pirates will come later in the game. The pre-generated missions also lack imagination at this stage, clearly being generated from a very limited pool of options.



Trade lanes (below) shunt players quickly across a system



STORYTELLING

The Freelancer engine can render indoor areas with a decent level of detail, although some textures are alarmingly low-resolution at this stage. Even though this would allow for a Deus Ex style free-roam of planet bars and other installations, the Freelancer team has decided to forgo player interaction in favour of more cinematic conversations between characters. The characters all appear motion-captured, so the movement is very fluid and natural. Indeed, the cutscenes offer all the advantages of FMV, maintain a consistent graphical style throughout the game, and reduce the need for ridiculous amounts of storage space - Freelancer is supplied on a single CD. More interaction would have been welcome, such as conversation options. The lack of these, coupled with the lack of a detailed communication system means character interaction is a largely sit-back-and-watch affair. This is disappointing but at this stage of development, probably something we will just have to learn to live with.

controlled by the mouse. The remnants of Chris Roberts' 'Neural Net' control system - where the player simply clicked on icons to control the ship - are still there, so all ship commands are accessible by clicking on parts of the HUD. Holding down the left mouse button switches to Free Flight Mode, and the cursor becomes a heading indicator so the ship will turn in whatever direction the player points. The spacebar toggles this option, and the right mouse button fires the weapons.

Like all good space sims, it's possible to fire all guns at once, individually or setup a custom selection. Oddly enough, both missiles and guns are fired with the right mouse button, so it's important to ensure your missiles are deselected before entering a fight, or you'll quickly empty your entire battery into the depths of space. It's a little awkward that there is no separate fire control for missiles, as its necessary to continually select and deselect the missile launcher. It's so awkward in fact that after a couple of missions, I dispensed with missiles altogether and invested in more powerful guns.

The HUD

The HUD itself seems more like something you'd find in a computer game than something you'd find in a military-grade spaceship. The colours are bright (sometimes garish) and the icons are large and friendly. The breadth of options is a curious combination of the Privateer/Freespace model and the more complex controls of I-War. Across the top of the screen there are four basic flight control icons, for Free Flight, Go To, Dock and Formation. Simply clicking on one of the last three will perform the relevant action on the selected target ship, station or planet. Attempting to dock with something out of range will result in a polite refusal from the ship's computer (generic fembot #332) and the icons will grey-out if not relevant to the current target.

Combat is as you'd expect - chase your enemy around and around trying to put your targeting reticle on the lead-indicator.

There is no radar, but the direction of all hostile targets (and targets currently speaking) is indicated by arrows around the edge of the HUD. When a target is selected but out of sight, the arrow is larger and contains information on the status of shields and armour, but not distance or speed information. Oddly enough, shields are very easy to take down, while armour takes some time to chew through, which seems rather backwards to me. The sound of gun impacts is very subtle at this stage, so you don't get that satisfying metallic sound like when you finally scored a hit on armour in Privateer.

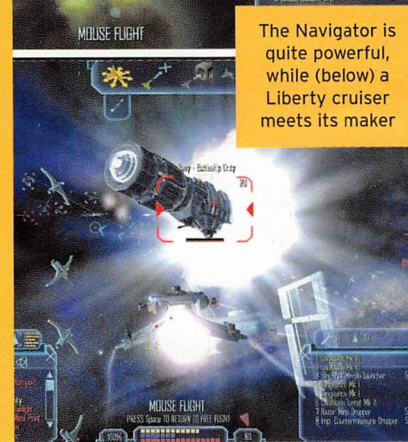
During combat there is lots of radio chatter between enemy ships warning each other of your actions and calling for help. However, the default volume for ships not actually talking to you is very low, so some twiddling will be required in the final options screen (not enabled in our press build).

Oddities

Probably the weirdest thing about flight in Freelancer is the default view. This is actually behind your ship, so your entire vessel is visible all the time. This really damages the sim feel of the game and gives it much more of an arcade flavour. There is



The Navigator is quite powerful, while (below) a Liberty cruiser meets its maker



an alternative view, but this simply removes the graphic of the ship, it doesn't change the field of view or show cockpit struts. This may change in the final build however, as the ships we flew in the Beta had single-piece cockpits with no struts.

Arcade-like or not, the default view actually works very well and dispenses with the need for a ship-status window in the HUD, as you can see which guns have been blown off. Indeed, ship detail is very good indeed, and there is even damage modelling. Fins are blown off, engine blocks get cracked and if you suffer enough damage the ship turns into nothing less than a fireball, belching smoke and flame indicating that you'd better apply some of the quick-fix repair nanobots before you completely break apart.

Hope against hope

Even after all this time Freelancer is not one hundred per cent finished. But it is very, very close. We have some concerns about some of the design directions the team has taken, opting as they have more for the Privateer model rather than the Elite model, but the game is nothing if not sleek and polished. And the complete lack of bugs in a supposedly unoptimised build is heartening indeed. We'll give them a month or so to finally polish the already shiny bits, and then give our final verdict in what will probably be one of the most exhaustive reviews in PCPP history.

Anthony Fordham

Vietcong

The US Army laughs in the face of controversy!

Developer: Pterodon ■ Publisher: Illusion ■ Distributor: Take2 ■ Available: March

Previous historical firstperson shooters had a certain luxury. The player could always rest assured that no matter what perverted shite the enemy threw at them, they were fighting on the side of good, of right, and of ultimate victory. Wolfenstein and Medal of Honor might have been jammed full of nasty Nazis, but at least the clean-cut hero was decent and British. Or American. Or whatever.

Simulating the Vietnam War is a stickier prospect. For a start, even the most disinterested historians would recall that allied forces in this conflict were ultimately forced to withdraw, and leave the country with their objectives unmet. Viet Cong forces eventually stormed the presidential compound in Saigon in, as I recall, an actual tank. Not bad for an enemy continually dismissed as a bunch of amateur Guerillas dancing about the jungle in black pajamas.

Fortunately, the nature of the armed forces of a democratic power is such that ultimate success or failure can be pinned on the integrity/incompetence of the High Command, thus leaving the plucky boys to get on with personal acts of bravery in face of heavy fire and napalm.

Czech your six!

Unsurprisingly, Vietcong is not being developed by a US company, but instead

exists as the brainchild of a smallish Czech developer called Pterodon. Previous titles from this company include Flying Heroes, which was an oddish aerial firstperson shooter, released by Talonsoft back in 2000. From the moderate success of this title, it occurred to Pterodon that a game based on the hugely popular Rambo license would be sure to rake in the cash, and so conceptual development began. Pterodon says it seemed sensible to set the game before John Rambo's return to the US, during the actual war. A few design meetings later, and it was decided to drop the movie license altogether and develop a completely independent Vietnam-flavoured shooter.

From a Stallone-driven action FPS, Vietcong has since involved to embrace the gameplay dynamic de-jour: squad-based tactical combat. Forcibly conscripted and dumped into the middle of the steaming jungle, the player must take command of a six-man squad in a variety of war-flavoured adventures: destruction of bridges and bases, clearing of minefields, simple firefights, or scouting ahead to call in air-strikes.

It's not all fun and games as team though, as the wild and oftentimes chaotic nature of the South-East Asian conflict means that player will frequently find themselves isolated from the rest of the team, and must scramble through "miles"

DOSSIER: P J DEFORT

Radioman

Sporting a bullet in the thigh from an ill-advised first encounter with the Viet Cong, PJ is the classic second-generation military, new-money brat. Obsessed with somehow proving to the world he is the best of the best, he at first trod in the footsteps of his father and signed up in the Air Force. Forced to resign after a rowdy altercation with a fellow officer and subsequently with the CO, PJ was forced to turn to the only people who would take him: the Army Rangers. Months of training paid off when the boys were sent in to Vietnam to give the nasty commies what for. Repeated chewings-out by his CO, bastardization in the Ranger's mess and the afore-mentioned bullet in the thigh have all served to dull PJ's arrogant edge, but a smart-alec radioman is still a mixed blessing, and this is one cookie you'll have to keep a close watch on, lest his madcap antics get you all shot in the eye.

RADIOMAN
NAME: Peter James Defort
RANK: Sergeant First Class
DATE OF BIRTH: December 21st, 1944
080560
CLARK AFB, TX



A-216



of underground tunnels, stomp through thick bush (full of ticks and bamboo traps no doubt) and shoot hundreds of nasty communists, before they eventually find their weary and blood-spattered way back to base.

Vehicular combat

The team, along with the player, will be made up of a radioman, an engineer, a medic, a heavy machinegunner, and of course the ever dependable (and hopefully bullet-proof) pointman. Each of these characters has a fleshed out dossier and military history, and will react in character to certain situations - the heavier the fire, the more dug in some of them will get, while others will simply panic and flee to the hills (there to be gunned down). In other words, it will be necessary to manage not only the weapons and abilities of the team, but also their various personalities in order to achieve peak combat performance.

This task will be further assisted by a full range of historically accurate weaponry, including such perennial favourites as the AK47, the Colt 1911 pistol and that pillar of southern US home defence, the M16 assault rifle. Various other weapons from both the US and Viet Cong will also feature, all part of a very generous arsenal as supplied by the developer.

Vehicles too play an important role in the game, with the opportunity to drive the classic jeep, transport trucks, other jeeps with mounted machine guns, Iroquois 'Huey' helicopters and you will also be able to call in, if not actually fly, the F5 Freedom Fighter to dump gallons and gallons of napalm, hopefully not on innocent civilians. Many of these vehicles have mounted weaponry, and it will be possible to command one of your teammates to pilot the vehicle while you jump on the blasters and open up on the village. Mounted weaponry includes .50 calibre MGs on the jeeps, and under-wing chainguns and rocket pods on the Hueys. Tasty!



Weather effects will have dramatic impact on combat

Environmental concerns

All exciting but still fairly standard stuff, you might be thinking. But fear not; Vietcong focuses particularly on highly detailed environments, offering some of the most 'natural' appearing maps we've ever seen.

Far from the boxy geometry seen even in Soldier of Fortune II's outdoor areas, the environments of Vietcong are incredibly detailed, with rocks, vegetation, waterways, fallen trees, ruins, roads, bridges and more. Much of this environment is destructible, so missions will task the player and their team with taking out those bridges, seeding roads with mines, and subsequently clearing minefields set by others.

The environments are designed to evoke the closeness and claustrophobia of jungle combat. With high-detailed foliage, it will be difficult to spot enemies, even when they are all but right on top of you. Expect numerous occasions where you duck under a log only to cop the full force of a machine gun nest right in the particulars. Clear thinking and a sharp eye will both be key to success in Vietcong.

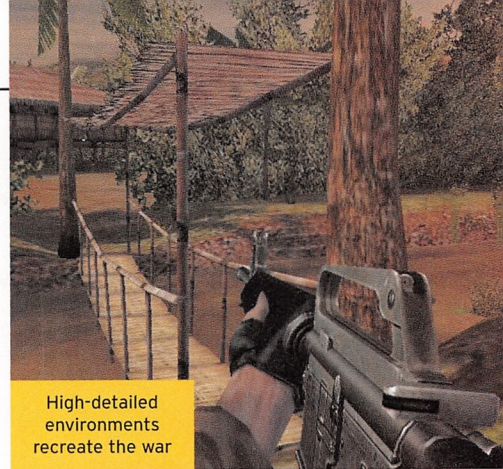
Pteradon promises a wide variety of missions, both team-based and solo, using vehicles, airstrikes, heavy explosives, or simply a pair of sticks and a length of palm rope, McGuyver style. The setting is controversial, that cannot be denied. How compelling it will be to play a game where the ultimate and inevitable end is miserable defeat remains to be seen.

In this together

Fortunately then, multiplayer will also be included, offering sweaty LAN-cafe types the opportunity to play as either US forces or the shadowy Viet Cong. Multiplayer will be supported over LAN or Internet, as usual, but no word yet on whether there will be a dedicated master server, or support for such third-party multiplayer intermediaries as Gamespy.

Battles should be sprawling affairs across the large environments, with both US bases and Viet Cong tunnel systems featuring on the same map. And in between, noman's land will be little more than a tangled mess of jungle, perfect for ambushes and surprise attacks. Once again, here comes a game with the potential to steal a bit of thunder from Counter-Strike, let alone snatch the historical FPS crown from Medal of Honor. But then again, we've heard that before. Let's hope the boys from the Czech Republic can tell the story of an American police action in a South-East Asian country better than the likes of say, John Woo attempting to depict war in the Pacific. Windtalkers indeed.

Justin Hoffman



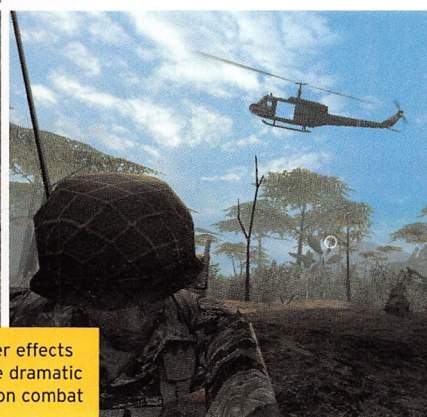
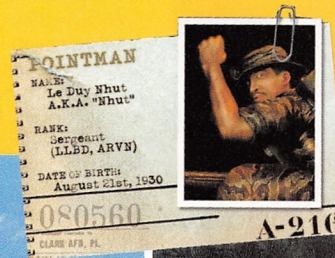
High-detailed environments recreate the war



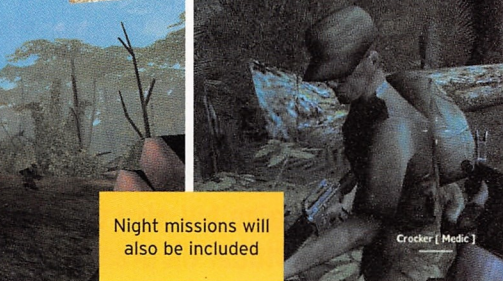
DOSSIER: LE DUY NHUT

Pointman

Ah yes! Orphaned by the Japanese, betrayed by the French, irritated by the communists and marginalised by the Free West, Nhut is the essential native soldier. He knows all, he says little. He flits through the bush like a spirit, touching down here and there to bring death and ruin to his enemies! Following a tragic childhood under the WW2-flavoured guns of the Japanese, Nhut grew up just fast enough to be part of the brave Viet Minh fighters who ousted the Japanese from his homeland. Seemingly happy under the French, Nhut was eventually forced to shoot a few officers, what with the raping and the maiming and the bureaucracy so rampant in the mountainous regions. Later, after having his whole village flattened by the Viet Cong, Nhut sold out to the Americans, swore allegiance to a military dictator, and became pointman for the player's squad of bloodthirsty warriors. Ideologically driven and amusingly ethnic, Nhut is a valuable but perhaps too trusting member of the team, and will no doubt get the pip if asked to napalm children.



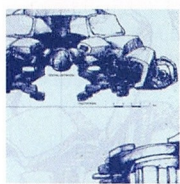
Night missions will also be included



UFO: Aftermath

Not actually an X-Com game after all

Developer: Altar ■ Publisher: Cenega ■ Distributor: TBA ■ Available: TBA



We took a First Look at *UFO:Aftermath* back in PCPP#81. Since then the title has undergone a few changes, not least of all firmly disavowing any links with the original X-Com franchise. PCPP's UK correspondent Derek Dela Fuente caught up with the developers and subsequently filed this report.

The acid test for any game in development - and this one has recently been signed by Cenega Publishing, a new publisher on the acquisitions trail - is not only the amount of coverage they are receiving but also what the sarcastic, overly critical, UK press is saying about them. The game is *UFO: Aftermath*, the developer is Altar Interactive and recent media coverage has targeted this as a top, must-have title for 2003 and a game with plenty of innovations and well-rounded strategic ideas.

UFO: Aftermath is a turn based strategy (TBS), top down, 3D isometric game with a sci-fi flavour and Altar has plenty of innovative ideas in place to ensure this

excites gamers. Jiri Rydl, spokesman for the developer: "The alien threat has been a common theme for many years now, so we decided to use the X-Com story as the background for our simultaneous turn-based strategy game. When it dawned on us that we would have to start from scratch, we decided to rename the game to show gamers that we were working on a completely different game."

Genre loyalists

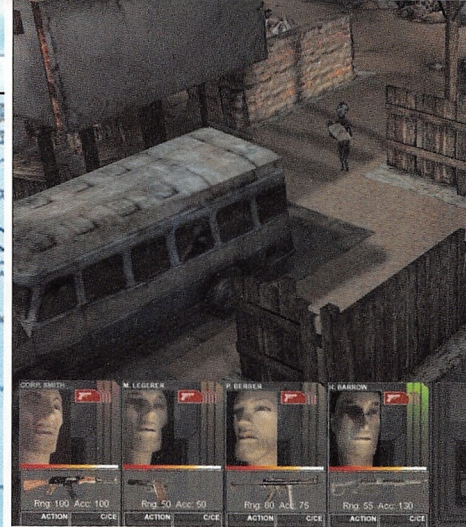
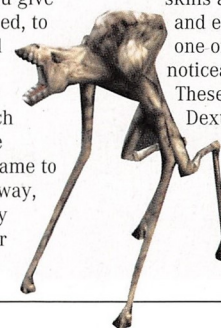
"In terms of the game's genre, we have nothing against one system or another, if it's right for the gameplay. Our previous title, *Original War*, was an RTS, but for *UFO: Aftermath* we developed an unique turn-based system with simultaneous turns, which features all the best elements of both turn-based and realtime combat systems. It works like this: You give orders while the game is paused, to avoid the frantic rush of a real time system. While paused, you can give your troops very detailed orders, taking as much time as you like. Once you are finished, you simply tell the game to start. Once the game is underway, you can pause the game at any point to update or change your orders, and the game will

automatically pause when important events occur, so that you may modify your plans accordingly."

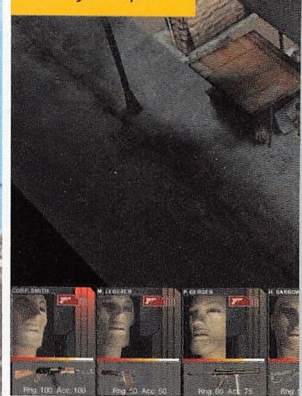
The setting for the game will see alien invaders target the Earth and governments around the world panic at this unprovoked attack. Together with stylised images, a superb use of sound, the opening sequence to the game sets the scene for the player. Strategy gamers should be eagerly waiting for their chance to save the world from ruin. The player must gather together the remaining peoples of the planet, find out what has happened, and, if possible, get your revenge.

More blood!

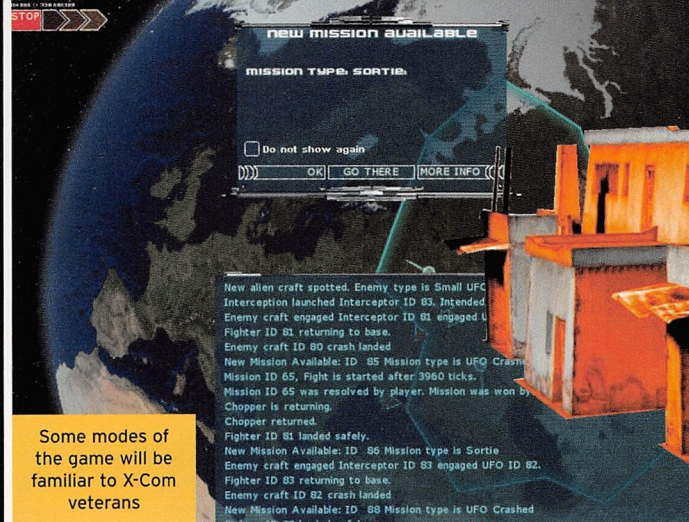
Explanation of the make-up of in game 'units/characters' was forthcoming. "Each of your troops has a set of statistics. Their skills are derived from these statistics, and each point that you put into any one of these attributes will have a noticeable effect on that soldier's skills. These attributes are - Strength, Agility, Dexterity, Willpower, Intelligence, and Perception. Raising Willpower should, for example, make the soldier more resistant to PSI influence, raising his Strength will make him able to carry more, etc."



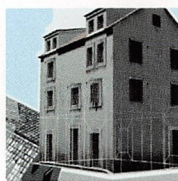
Times like this I always get the urge to spit



The acid test for any game in development is not only the amount of their coverage they receive but also what the sarcastic, overly critical UK press is saying about them



Some modes of the game will be familiar to X-Com veterans



"This way you can, with enough experience, easily make your soldier into whatever you want them to be, either generalists or specialists. You can produce snipers, medics, heavy weapons experts, or any mix of all of these skills. It is very important that you do so, in fact, as a group of random, average soldiers who are good at everything and excellent at nothing will suffer."

There are two main sections of the game: in strategic mode, you must manage your bases, interceptors, and squads. Also important is the 'biomass' - a slimy, tangled mass creeping slowly across the world. Territory is equal to power in the game - the more you control, the better your interceptor coverage, the faster you can do research, and the more biomass you can repulse. Most of your time, however, will be spent in tactical missions, fighting on the ground against aliens and mutants for the control of territories. Once you control a territory, you can decide what type of base you want: Research, Military, Manufacture or Biomass Repulsion.

Repulsive!

Each tactical mission takes place on its own, uniquely generated battlefield. Altar doesn't use templates; each of the fully three dimensional game fields is totally different, so you aren't stuck feeling like you're playing the same mission over and over, allowing for maximum replayability. That means there are no levels to be completed, just an ever-changing number of missions to resolve with your squad. There will be many types of missions, including investigating shot down UFOs, acquiring specific artefacts, gaining new territory in the geosphere, securing new bases, and protecting territory that you already possess from enemy incursion. The missions you do not choose remain available for some time and then they are auto-resolved.

Gaining territories and building bases

is necessary for advancing in the game. Bases are the only resource you have to manage, but they are very important. Also, there are flexible controls for zooming and rotating the view, so it's up to the player which view fits him the best.

All their base

"UFO: Aftermath offers several levels of difficulty, thus the amount of time necessary for finishing the game will vary. We expect that UFO: Aftermath will take about 80 hours and 100+ randomly generated missions to finish on the toughest level of difficulty."

Will UFO: Aftermath stand out from the pack? Altar thinks so. "There are several features which haven't been used together on the strategy games field yet: simultaneous turn-based combat; randomly generated tactical missions; strong RPG elements; and a frighteningly alien setting displayed in full 3D. These features make UFO: Aftermath an interesting title for every strategy games player."

UFO: Aftermath is strictly a singleplayer game. At present, allowing for mods is not an important focus but there are plans to release tools for changing the look of your troops or enemies, and maybe weapons and some other game features. "Whether or not the editor will be part of the game is a question for the publisher."

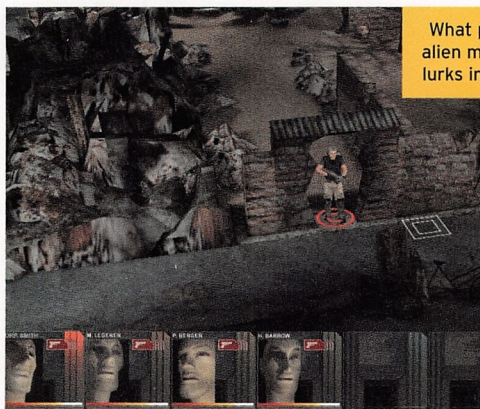
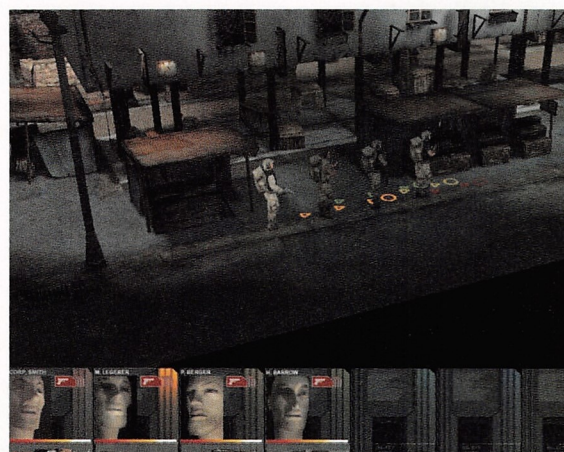
Already UFO: Aftermath is looking tasty and will offer PC gamers a pleasing and engrossing experience. Jiri was eager to have the last

RAY GUNS FOR SPACEMEN

There will be over 70 weapons altogether. At first, you will have access to normal weapons like the H&K MP5, AK-47, etc. As you capture alien equipment, you can research it to gain access to laser weapons, plasma weapons, and various PSI technologies. Since there are supposedly no humans left for governing, trading or manufacturing on their own, you have to gain territories, build bases, find survivors and manufacture every special weapon that you need. On the other hand, common weapons and ammunition is available in unlimited amounts from the beginning.

word: "UFO: Aftermath combines deep global strategy with tense tactical missions, weaving them together with a compelling storyline and a richly strategic, RPG-like approach to each soldier's attributes and skills. Prepare yourself for the greatest battle for the future of humankind."

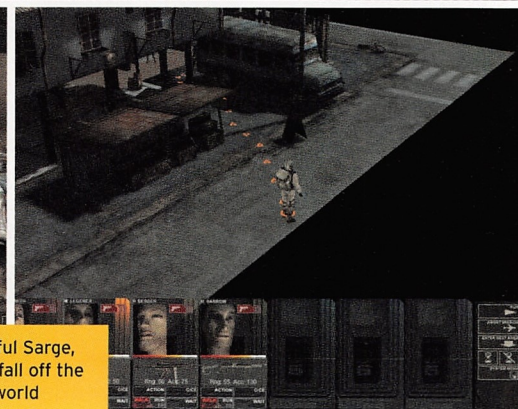
Derek Dela Fuente



What perverted alien monstrosity lurks in the junk?



Careful Sarge, you'll fall off the world



Republic: The Revolution

Interview with Demis Hassabis

It's the game where you rule the world. Or at least a small east-European country. It's also one of the most elusive games around, but PCPP's UK correspondent Derek Dela Fuente managed to track down Republic lead designer Demis Hassabis for a bit of a chin-wag, what.

Republic: The Revolution is the brainchild of Demis Hassabis, who received a Double First Class degree from Cambridge University, co created Theme Park and worked as senior programmer on Black & White. Also a Chess Master at the age of 12 and the Mind Sports Olympiad World Champion, Demis founded Elixir Studios in 1998 and is the Lead Designer on Elixir's first game 'Republic: The

Revolution'. The reason for this nice little intro is to show that Demis is a clever chap. Republic is due for release mid 2003 after a number of delays due to the fact that Eidos wanted to further improve the game. Indeed, the main criticism that has been targeted towards the game is that it could be too deep and complex although general consensus is that this could be one of the best games of 2003.

Starting with a single loyal supporter, a tiny secret HQ and a very small base of local support, you must build up a nationwide faction powerful enough to oust the President and rule the Republic of Novistrana. Up to 16 other factions (human or computer controlled) will be doing everything in their power to stop you and seize control for themselves. And, of course, most

formidable of all is the President - he'll go to any lengths necessary to hold on to power.

PCPP: Sounds complicated. So what are the main objectives in Republic?

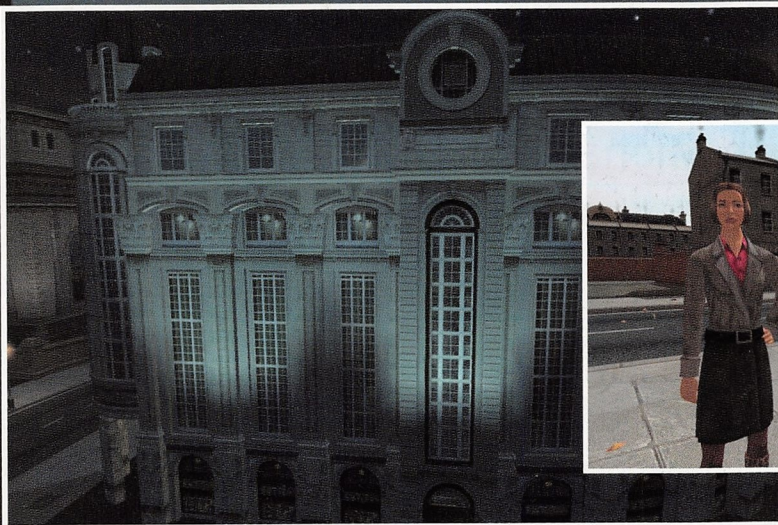
Demis: The game is set in the early 90s in a fictional Eastern European Republic called Novistrana. You are a young and charismatic faction leader out to oust the oppressive President of the Republic and liberate the people. You have to build your powerbase from the grassroots up and recruit various key characters to your cause along the way. How you go about this is down to you but there will be many sub-objectives along the way that have to be achieved during your quest for absolute power, such as getting the mass media over to your side.

By taking their own unique path through the game players make their own epic story to power. There will be hundreds of actions that can be carried out in the final game and depending on the path to power that the player takes only a small percentage will be seen in any single campaign game.

PCPP: A lot of people are confused about the many in game ideas (they fear it is too cerebral), has this not been a worry to you and the team? Put another way, many are concerned that at times you appear to be too intellectual and the concern now is, will the game have loads of game play throughout and you will be able to understand what is required?

Demis: Throughout development we've focused on making sure we present the potentially complex





subject matter of the game in the most clear and intuitive way possible. A major part of getting this right is the design of the interface. This is one main area we've been concentrating on and is something we'll be honing right until release. Any subject can appear complex or simple depending on how it is presented and the setting for Republic is no different. We intentionally wanted to do a game that dealt with a 'weightier' subject than the usual game fare. If games are to be taken as a more serious entertainment medium and reach a wider audience then I believe this is one of the things we as an industry need to do. Republic is really a deep strategy game built on top of a minutely detailed simulation of a living, breathing world. I think giving games realistic and interesting environments for a player to explore in a freeform way is something we'll be seeing more and more of in games in the future.

PCPP: What are the features within Republic you are most please with and see as innovative?

Demis: There is no single feature I am most proud of as such, more just the whole package. But if I had to pick out a couple of features then I guess it would be the flexibility of the AI to

cope with simulating in minute detail something as complex as a capital city and similarly the power of the graphics engine to visually release it. Probably the game's most innovative feature is really the design and the gameplay, it's different from anything else out there.

PCPP: What has been the biggest problem that has caused the delay in the game and what up until recently has been the hardest aspect of putting the game together?

Demis: Our continuous level of detail graphics engine, Totality, has probably been the hardest single piece of technology we've had to create. Also several parts of the underlying AI architecture are groundbreaking and it's been a complex piece of technology to build too. However, I would say that what we have invested the largest amount of development time building are industrial strength design tools that are robust and efficient enough to allow our designers to create the vast amount of content needed by a game such as Republic. At the outset we simply underestimated the time to create aspects of these complex pieces of technology and when you factor in the inevitable distractions of building up a company from nothing then in retrospect it is not surprising things

have taken as long as they have.

PCPP: Expectations are so high now for the game. Does this worry you?

Demis: Expectations are very high which does increase the pressure. Having said that, at least it means people are interested in what you are doing! Peter [Molyneux, creator of Black & White] and I are good friends and we talk often, normally about games, ideas, the industry in general and old times.

PCPP: Are you confident of the game's success and what kind of gamer are you trying to attract?

Demis: There's no sure formula that can guarantee success of an original game. That's part of exploring the unknown. However, I am pleased with where we are at this stage and I'm confident that we will deliver a great gaming experience.

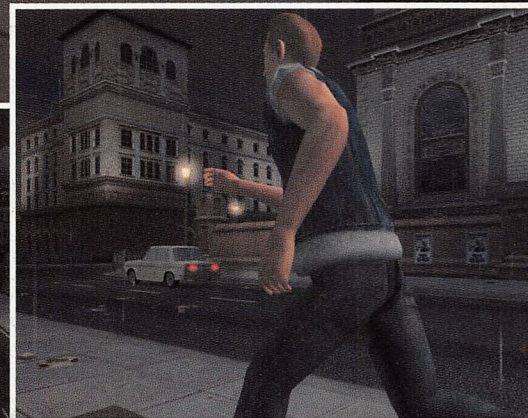
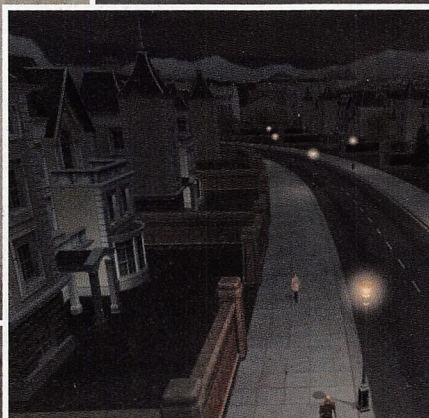
PCPP: What has inspired you to make the game and what are your inspirations outside of the gaming field?

Demis: Three things inspired the creation of Republic: a fascinating book by the brilliant Elias Canetti (a Nobel Prize winner) called *Crowds and Power* explaining the whole of human history in terms of mob power; a fun board game I played at college called *Junta* set in a Banana Republic where the aim is to embezzle as much money as possible whilst in power; and last

but not least, real life events surrounding the fall of Gorbachev, the USSR, and the rise of Yeltsin in the early 90s. I find anything creative of interest, be it fashion to paintings. But mostly I get my inspiration from film, books and from music.

PCPP: Republic doesn't fall into any particular game genre (or does it?). Do you believe this is the way forward with 'people' games, for want of a better expression?

Demis: Republic's really a hybrid game that sits somewhere between the simulation and strategy genres, thus we describe it as a strategy-simulation game. I've been involved with simulation games before (such as *Theme Park*) and although I enjoy straight simulation games the strategy gamer side of me always felt something was lacking. In those sorts of games there's no clear overall goal or objective, in Republic there is and it's very simple: become President. So Republic is really a deep strategy game built on top of a detailed simulation of a living, breathing world. I think giving games realistic and interesting environments for a player to explore in a freeform way is something we'll be seeing more and more of in games in the future and has already seen great success in games like *GTA*.



ROME: Total War

Interview with Michael de Platter

Following on from last month's introductory preview, we snared the ear of lead programmer Michael de Platter of Creative Assembly and forced him to surrender vital details. Steve Polak grabs his pilum and assumes a tortoise formation.

The Total War series is fast shaping up as the definitive thinking man's RTS. Shogun and Medieval have both left us gobsmacked by their combination of accessible real time combat mechanics and gameplay which is truly Atlantean when it comes to depth. Have you finished exploring all of the nooks and crannies of Medieval? Like us the game is probably ensconced on your hard drive with the CD regularly getting more than a few revolutions as you have a crack at it again and again.

Can another game ever deliver better real time wargaming?

We reckon the only one that will beat Medieval: Total War will be the game that shall follow in its gargantuan footsteps and thankfully this digital distraction is already well and truly in production.

Aussie developer living abroad Michael de Platter managed to put his whinges about living in the UK aside long enough to give us the low down.

PCPP: So what are the most obvious changes to the formula?

Mike: The game is set in the Roman era and starts during the Punic wars and continues until the fall of the Roman Empire.

PCPP: The engine has been updated too?

Mike: The battlefield is going to full 3D, and quite high detail 3D at that. We still have thousands of men on the battlefield too. Each of the unit types will also have their own unique animations and there will be specific models for generals. The general will be an elaborately armoured guy on his white horse on the battlefield. We can also mix up units in formations, so in a formation of Legionnaires there will be a standard bearer and other guys like musicians who stand out too.

PCPP: So the days of whacking a flag in the backpack of a soldier and leaving it at that are gone then eh?

Mike: The thing is the leap to 3D has made it easier to incorporate detailed characters by using techniques like motion capture which helps us present interesting stuff like men climbing siege ladders, getting into tortoise formation or operating ballista properly. It makes for a more realistic-looking battlefield.

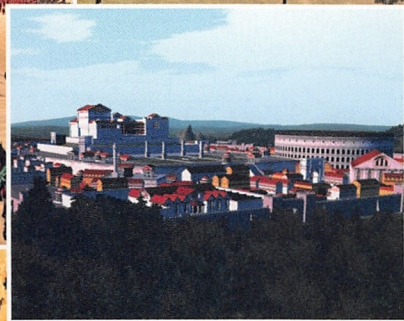
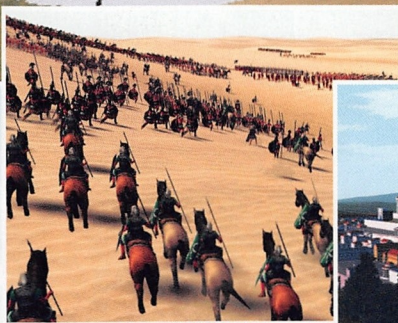
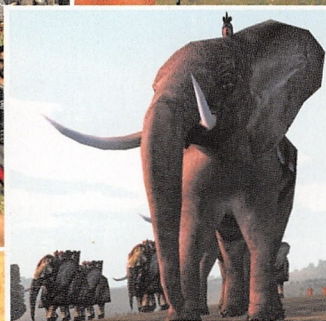
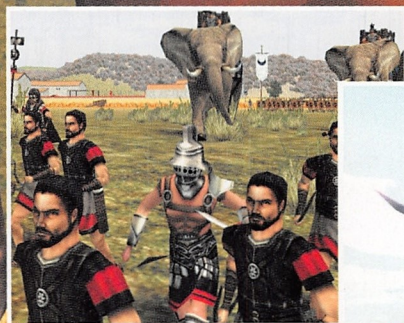
PCPP: The old approach where the men behaved like a contiguous block

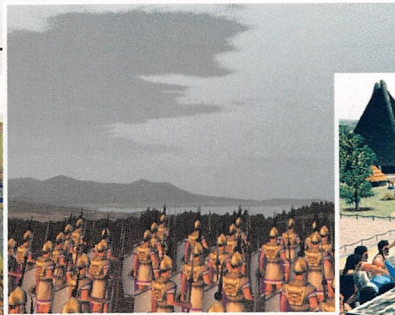
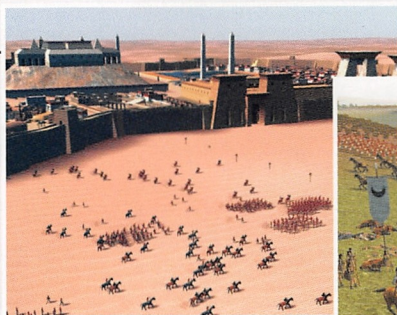
certainly did look odd. So you have moved away from this?

Mike: Yes. This also opens up gameplay options as you can really get your men to do more dynamic stuff on the battlefield. Arming battlements will also be a possibility. The men won't move in unison and so it looks far more realistic. There is some coherence to unit animations so you can work out what your men are doing though. We have different formation types for different troops. There are the very disciplined Roman forces, and then there are barbarian mobs that are just that, seething mobs of warriors. Each formation type suits the troop types and opens up tactical possibilities. We still use the basic formation approach though as you have to have tactical units of a certain size or you lose control of the battle.

PCPP: The strategic side of the game has seen the most change hasn't it?

Mike: You bet. We have majorly changed the way the strategic game will work, abandoning the Risk-based territory approach we have made the landmass more open. It won't be like moving chess pieces, but more like strategically moving enemies on real world terrain. No artificial borders from now on. You can engage in manoeuvres like guarding a pass between a group of mountains or move your troops across country on a grand scale to outflank the enemy and set up a battlefield which suits your approach. The terrain will cover the whole of Europe, with every terrain square corresponding with the battlefield, these will be clearly connected. You will also be able to see cities in the tactical battle mode and this makes the whole process feel like the same game. You won't build your own cities though, in terms of actually placing constructions in the way you would for a game like Command and





Conquer, as our focus is more on troop management.

PCPP: Will there be a host of new realistic units too?

Mike: An important aspect of the Total War series for us is the sense of attention to detail, and we have emphasised this even more this time around with more unique units, specific tech trees and clearly evident formation and strategy types. The Carthaginians, Romans and Barbarians are all very unique in their look and this extends right down to motion capture and unique units like elephants and chariots.

PCPP: So how hard was it to motion capture an elephant and was this a world first?

Mike: The chariots were the hardest to get the sensors on with their wheels! No, but really you will be impressed by the level of detail especially when you realise that there are still massive numbers of troops on the field.

PCPP: How about the economic side? What developments have been made there?

Mike: Resources will be unique to regions and you will see them on the map and the battlefield and will fight for control of them, by winning battles in their immediate vicinity. You won't use engineers to grab resources, but will have to think about where you want to win battles so that you can claim certain resources necessary to the building of your empire. This element is still being massaged as we speak.

We want it to be streamlined and not complex like a game like Civ.

PCPP: Rumour has it the terrain will also be a more

integral part of your strategy?

Mike: Yes your intelligence is right, you will be able to modify the terrain to suit your approach and for example the Romans were notorious road builders and they used roads to move their cumbersome armies to trouble spots, so this is something which it is advantageous to do if you are controlling the forces of Rome. You can also build watchtowers in specific areas. Buildings within a city also appear when you build them, but you don't choose where they go. The cities will be massive and great place for a battle. Settlements will also have health statistics and will grow of their own accord if you help feed them resources.

PCPP: So how do you create armies in this new model?

Mike: The population is recruited from the town and you can also reverse things, reabsorbing armies into cities boosting production as long as there is enough food to support them.

PCPP: Will attacking towns be more engaging?

Mike: Yes, and sieges will also be more involved too. You will have sappers who weaken walls, troops manning walls and siege engines which break them down. It will be more realistic and satisfying. Indeed this was the single thing that was most lacking for us in Medieval. The previous approach was more a limitation of the engine, and this isn't a problem with the new

technology we have developed.

PCPP: Will you be able to visibly improve your fortifications?

Mike: Not only visibly, although seeing the changes is nice, but you will be strengthening your defences in meaningful ways, upgrading walls, towers and gatehouses. You can also build fortresses in other points, although for the moment it will be that you build these with default templates and can't modify the architecture at all.

PCPP: Have you also taken the slightly convoluted tech tree and building development system and streamlined it so that buildings are more logically presented to the player?

Mike: Yes this is something we were eager to do and so the tech tree is organised slightly differently in that there are function-specific buildings (say ten or so) and each is organised with the theme of its main gameplay function in mind. There is a marketplace that handles obvious economic development, the blacksmith handles weapon development and the barracks handles new troop types. This is simpler and more easy to use, while giving the player more technological options into the bargain. It is a more hierarchical approach.

PCPP: It certainly sounds like you have done your homework, we'll now leave you to get on with your day amidst the dark 7am winter weather.

Mike: Do you have to? No really I am loving working on the game and I think our latest effort will push the boundaries even further.

TURNED ON

One of the most significant changes in the game is the way the two halves of the action are managed. Using the same engine and looking to integrate the terrain and cities more closely so that they appear to be the same in either battle mode or management mode certainly presented the development team with the temptation to remove the turn-based stuff. Going with a pause-enable real time approach where you oversaw the economic development of your empire as the armies march might have been interesting, but this approach simply didn't deliver the opportunities for deep and involving overarching strategic gameplay afforded by the turn-based approach and so turn-based stayed. We reckon it is a good idea too, as pooping off to the loo (I'm sure he means 'popping' but hey, this works too - Ed) is so much easier knowing your whole empire is holding its breath waiting for you to return.





Warcraft 3: The Frozen Throne

Blizzard makes the best expansions. And this looks like no exception

Developer: Blizzard ■ Publisher: Vivendi ■ Distributor: Vivendi ■ Available: Q1 2003

It's been less than a year, but already Warcraft 3 has proven itself to be every bit the blockbuster that Blizzard was hoping for and that fans were expecting. So with over 2 million in sales and scores of positive reviews, what else is there to expect from this role-playing strategy game? A lot, as it turns out.

Like the Starcraft expansion, Warcraft 3: The Frozen Throne is continuing a Blizzard tradition and adding loads of new content, including new campaigns for each

race, new heroes, new units, new upgrades, an improved world editor, general gameplay enhancements, and highly-anticipated Battle.net upgrades. About the only thing that isn't in is a whole new race, but with all the goodies in Frozen Throne there should be more than enough to please even the most die-hard Warcraft 3 fan.

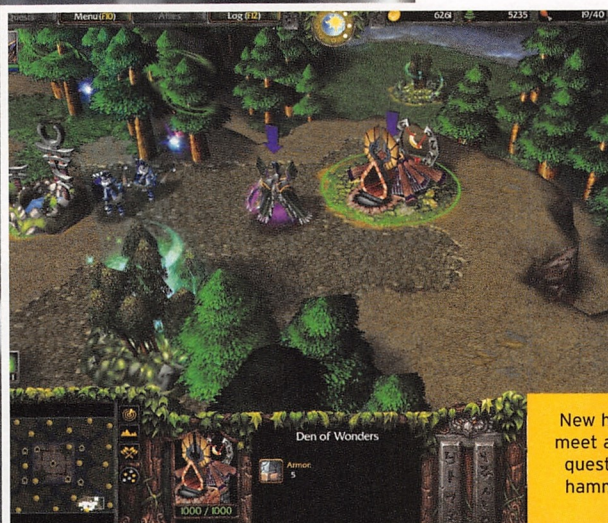
Not a chilly toilet

The title for the expansion pack is the



New creeps include amphibious turtles





New heroes to meet and crazy quests to get hammered in

NEW ALLIANCE HERO

The new hero is the Blood Mage, a spellcaster who, like the Archmage, can dish out lots of damage but is frail in combat. His spells include flame strike, mana flare, and banish. Flame strike is an area affect fire spell that can deal several hundred points of damage to all foes caught in the spread, with the greatest damage concentrated in the center. At its highest level, it will be able to take out units like archers and head hunters in one shot. Unlike blizzard, though, it isn't interruptable. To balance it out, flame strike has a slightly extended casting time, during which you can move out of the way or attack the blood mage. But as soon as the spell is cast, an explosion of fire deals instantaneous damage to all in the blast. Mana flare is a great way to make enemy spellcasters pay for using magic. It is a buff that you cast on your own units and anytime an enemy caster uses a spell near the buffed unit, a fork of energy will attack the offending caster, dealing damage proportional to the mana spent. At level one, the ratio is one to one, but at level three, it will be three points of damage to every one mana spent. That means an enemy sorceress will kill herself instantly if she tries to cast polymorph on your mana flared knight. Likewise for a banshee that attempts possession or a necromancer that tries to cast cripple.

Banish is a spell that removes a unit from play, but only for a brief time. When you cast banish on an enemy unit or hero, it turns into a ghost, unable to interact with the world. It can't cast spells, attack, or be attacked. However, it can still move. The duration isn't great (it does improve with level), but it's long enough to remove a creep leader from play while you destroy all his minions, or render a hero useless while you mop up his troops. The blood mage's ultimate is called the Mark of Chaos, and it turns a single friendly unit into a demon. Any unit will do, from a peasant to a knight. Once transformed, the unit becomes a powerful demon unit for a long duration. At this moment in the beta, that unit is a Doom Guard, but in the final version it will be more powerful than an Infernal. Pardo reasons that the Mark of Chaos should be more powerful, since it has to use an existing unit as the seed and has no secondary effect, like the Infernal's initial stun.



Mountain Giants are sure to be a firm favourite



Like the Starcraft expansion, Warcraft 3: Frozen Throne is continuing a Blizzard tradition and adding loads of new content

focus of the new single-player campaigns. The main protagonists of the campaign arc are the Night Elf renegade Illidan and the traitorous death knight, Arthas. Both of them are racing to claim the Frozen Throne, which lies in the icy wastes of Northrend. The majority of the campaign missions focus on what it is

and why these two powerful figures are seeking it.

Warcraft 3 fans already know Arthas is a villain not to be trusted, but Illidan likewise is a force for evil, despite his help in defeating the demons in Warcraft 3. In fact, it is Illidan who creates the expansion's new ubiquitous villain-race, the Naga. Serpentine creatures that dwell beneath the seas, they have been risen from the waters to serve as Illidan's host. They are, as designer Rob Pardo says, "global bad guys" to vex the races of Warcraft. These Naga take the place of the demons, and have their own heroes and units. And just like the demons, they will not be a playable race.

The campaign arc starts with the Night Elves, progresses to the Human Alliance, and ends with the Undead Scourge. What of the Orcs? We'll get to that later. The overriding hero, or in this case, heroine, of the Night Elf campaign is the female warden of Illidan's old prison in Kalimdor. She has been sent to track him down, recapture him, and return the demon hunter to his imprisonment. Obviously, the designers at Blizzard wanted to showcase the new heroes in the expansion, and what better way to do that than in the campaigns. Thus, this Night Elf keeper who drives the campaign will be the new hero unit for the Sentinels.

In similar fashion, the Human

NEW ALLIANCE UNITS

Warcraft 3: The Frozen Throne will offer four new heroes, and at least eight new units. All of the Human Alliance's new units are Blood Elves. One of them, the dragon hawk, we already saw in the Undead campaign of Warcraft 3. However, it is being enhanced for the expansion. The dragon hawk's primary function will be to assist in laying siege to enemy bases. It has an ability called cloud that it can cast over enemy towers, rendering them useless. While under a cloud, a tower will be unable to attack, letting your own units move in to destroy them without fear of being hit. Cloud will not work against units. The visual effect of the cloud spell is excellent, as you see the shrouded silhouettes of your footmen within the rolling fog. The dragon hawk will retain its attack as well, but at this point, Pardo says the attack might change as the dragon hawk finds its niche between the existing gyrocopter and griffon rider. The other new Human unit is the Spellbreaker, and it will be analogous to the Night Elf dryad. It's designed to neutralize enemy magic, but it does it in a creative way. The Spellbreaker has one spell called spell stealing, which steals buffs from enemy units. The Spellbreaker then turns around and casts the buff on your own unit. So if a group of bloodlusted grunts rush up to your footmen, your Spellbreaker can take bloodlust off of the orcs and cast it on your footmen. Not only do his troops lose the benefits of bloodlust, but now you gain them instead. Spellbreakers also have an ability called spell defend. Like the footmen, Spellbreakers can raise their shields, during which time they are immune to all magic. As an anticaster, the Spellbreaker won't have magic upgrades, but will have a potent attack and benefit from attack and armour upgrades. Both the Spellbreaker and dragon hawk will be built from the arcane sanctum.

campaign is led by the new Human hero, a blood mage named Kael. His is the story of the High Elves. After Arthas destroyed Quel-thalas, the High Elves were displaced and homeless. Bathed in the blood of their fallen, these remaining survivors set about rebuilding their home. Perhaps to honor their dead, they forsook their old High Elf name and adopted the new moniker of Blood Elves. The Human campaign is the story of how these newly-dubbed Blood Elves deal with their tragic loss and find a new place for themselves in the War of Chaos' aftermath. Their life philosophy also undergoes a change, but they remain loyal allies of the rest of the Human Alliance, who must still deal with the Scourge presence in Lordaeron.

Meanwhile, the Undead campaign will concentrate on Arthas' quest for the Frozen Throne. Elements of this overarching theme will be woven into the previous campaigns, especially since Illidan, who is also searching for the Throne, is the subject of the manhunt in the Night Elf missions. In the Undead campaign and missions prior, the journey to find the Frozen Throne will wind through new lands of Azeroth, including tropical archipelagoes at sea and the frozen ruins of old Nerubian cities, before



And so ugly. A Sea Giant



finally culminating in Northrend.

As for the Orcs, Blizzard felt that they didn't fit perfectly into the overall story arc of the single-player campaign, and it also wanted to showcase the new campaign features of the enhanced world editor, so the designers decided to create a special Orc-specific campaign that stands on its own. The storyline will probably be the founding of a new Orc city in Kalimdor, but the big news is that it will show off the new custom campaign feature. This will allow players to now string missions together and add cut scenes and voiceovers, creating a seamless player-created campaign, rather than a list of missions to be clicked through, as was the case with the Enslaver campaign that shipped with Starcraft.

Gameplay Improvements

Aside from the new campaigns and world editor enhancements, though, there are scores of improvements to the general gameplay that range from mundane to monumental.

Blizzard showed us several immediate changes to air pathing, which should make melee air units much more effective in battle. Now, units spread out when moving, as in Starcraft, and air units now pass through other friendly air units so they no longer have to stutter around other friendlies.

In addition, you'll now be able to queue up building construction for all the races.

Aside from the new campaigns and enhancements, there are scores of improvements to the general game play that range from mundane to monumental

You can lay down orders for multiple farms, or multiple burrows, or other various buildings. And you can also create rally waypoints. Previously, if you set your way point at the frontlines of battle, your units would take the straightest path, regardless of whether they walked through hostile creeps or not. With rally waypoints you can now specify the path you want your fresh troops to take when



NEW ORC HEROES

The Orcs are undergoing some much-needed improvements. At this point, they're poor at dispelling magic, healing, and air capabilities. All these needs are being addressed with their new hero and units, and the unique items available at their shop.

The new Orc hero is the troll Shadow Hunter, a supporting spellcaster who is a little stronger than the farseer in terms of durability. Its his spells that really make him powerful, and the current favorite new hero at Blizzard. His spells are hex, healing wave, and serpent ward. Hex is basically polymorph, and it turns any unit, including heroes, into a critter. The ability to hex heroes sounds devastating, but like other spells, hex has a shorter duration for heroes than it does regular units. Still, being able to turn an enemy hero into a chicken is well-worth it. Unlike polymorph, hex turns the target into a random animal, so you could populate the battlefield with sheep, chickens, pigs, and other critters. As you level up this spell, its duration extends. Healing wave gives the Orcs early healing capabilities. It operates in all ways like chain lightning, except it heals your friendly units. Serpent ward continues the troll caster theme, and plants a translucent cobra-shaped ward on the ground. It has a very high piercing attack, and lasts quite a long time, although it cannot move and has low hit points. But it does give the Orcs another high-powered attack in battle, and it can hit ground or air units. As it increases in level, it does more damage. Aside from the cool down on this spell, there is no limit on the number of serpent wards you can have at a time, unlike the farseer's spirit wolf spell. The shadow hunter's ultimate spell is voodoo. Like starfall and earthquake, it needs to be channeled, but while it is being cast, all your nearby friendly units are completely invulnerable to attack and spells. The only way to stop these units is to kill the shadow hunter or wait for the spell to end. This ultimate makes the Orcs absolutely devastating at destroying towns.



New spells have been carefully balanced



moving to the front of the action.

Other myriad small enhancements include being able to queue up upgrades, and being able to alternate units and upgrades in the same building. So for instance, you could queue up all the attack upgrades at your War Mill so you don't have to return to it every time it finishes just to resume research on the next level. And at the Barracks, you could queue up a Grunt, then Troll

Regeneration, and then a Head Hunter. The mini map in the game has also been gifted with an enhancement: now it will show the location of all creep camps, which comes in handy when playing on a map you've never encountered before. Lastly, you'll now be able to press the "Alt" key at any time to see the health bars of all your units and buildings on screen.

Sunken Ruins and Ice Crown

Aside from enhancements to the user interface and controls, there will be three new tilesets shipping with the game. To better render the globe-trotting nature of the three-part campaign arc, Blizzard is creating a tropical island tileset called Sunken Ruins, an alternative snow tileset called Ice Crown, and a third tileset to be determined. Sunken Ruins is an island



An Arcane Vault. Full of naughty goodies!



NEW UNDEAD UNITS

Pardo also showed off the new Undead hero and units. The new hero is the Crypt Lord, a massive beetle who is meant to be the Scourge's answer to the Tauren Chieftain. It gives the Undead a tank-like hero that can mete out lots of melee punishment and soak up lots of damage. His abilities include impale, carrion scarabs, and thorny shield. Impale is an attack that tosses the target in the air, doing lots of damage and stunning the opponent. Carrion scarabs uses corpses, spawning one scarab per corpse. A scarab is a small beetle unit, but unlike other summoned creatures, it is permanent until destroyed. At level one, you can have up to four scarabs, while at level three, you can have six. And as you upgrade the ability, your scarabs will get stronger. Because scarabs don't have a timer and you can have so many at level one, Blizzard anticipates that players will be able to creep very easily in the early game with the Crypt Lord, or even attempt early strikes at enemy players. Thorny shield is a passive damage shield. It not only gives bonus armour to the Crypt Lord, but it also returns a percentage of damage dealt on the hero back to the attacking unit. Finally, his ultimate spell is locust swarm. It's also an area of effect attack spell that is not interruptible. Once cast, a massive swarm of buzzing insects assault all units in the area. Locust swarm will be roughly as powerful as blizzard, but not as strong as starfall. Of the Undead's new units, one of them is the aforementioned scarab. The other is the skeletal mage, which comes about once you research the new Skeletal Mastery at the Temple of the Damned. Once done, it will allow the necromancer to raise one skeletal mage and one skeleton warrior from a corpse, instead of two warriors. The mage has no spells but has a fiery ranged attack. It's basically a skeleton that can attack from range, but it now makes it much easier for an Undead player to get the full benefit from his massive horde of raised skeletons. Blizzard will design another Undead unit, but at this point, it's not clear what niche that unit will fill. But, the designers have already decided to enhance some pre-existing units. Crypt fiends will now have the ability to burrow, an upgrade you can research fairly early. It allows the fiends to hide underground, where they can regenerate while remaining unseen. Scarabs, as well, will be able to burrow. In fact, the crypt fiends aren't the only units that will be improved, as Blizzard is taking a long look at underused units, like the Human steam tank and Orc head hunter, and thinking of upgrades to give them to make them more useful.



map with lots of pools, rivers, and shoreline. The traditional trees are replaced with palm trees, and lots of Mayan-like ruins dot the landscape. There will be new creeps populating the island as well, including gargantuan sea turtles, sea giants, and mur'guls, which are red-skinned, chaos Murlocs. The critter of this level is the hermit crab. Some of the creeps, notably the sea turtles, will be amphibious, and you'll see them wading in ocean water or lakes where they'll be untouchable. You'll have to draw them onto shore if you want to fight them. Ice Crown is another ice map to go along with the

ORC UNITS AND ITEMS

One of the new units for the Orcs is still being designed, but the other is the troll bat rider, an air unit out of the bestiary. It is a tier two unit, so it is available fairly quickly. It has an air to ground siege attack, so it is good at taking down buildings, but it also has an answer for enemy air units. The bat rider will start play with the unstable concoction ability, which is basically a kamikaze attack. It lets your rider ram into an unfriendly flyer and detonate, doing damage to the enemy unit. The explosion, which concentrates in the center and does less damage to the outer ring, should be strong enough to take down a gargoyle or similar unit. The bat rider can also research the liquid fire upgrade, which lets it do damage over time to buildings it attacks, and also prevents those buildings from being repaired. In addition to the new unit and heroes, Blizzard anticipates that it will make a change to the raider, to make it more resilient during town sieges and more durable against air units. The enhancement might be as simple as a change in armour class, but the specifics remain to be seen. Lastly, at the Orc voodoo lounge, some of the unique Orc items you will be able to buy are the wand of neutralization and healing salves. The wand of neutralization is a three charge item that casts a chain lightning version of dispel magic, giving the Orcs the much-needed ability to cancel enemy magic without having to use the cumbersome purge spell. Healing salves is yet another new healing method for the Orcs, being another three-charge item that you apply to any unit, which then gains regeneration for up to 400 hit points (perhaps similar to the Night Elf rejuvenation spell). The healing salve, which will be available as tier one item, should make it easier for Orc players to creep in the early game and preserve their first few units.

Northrend tileset. Instead of more snow and mountains, though, it is a map of the ancient Nerubian ruins under Northrend, so expect lots of frozen alien architecture and sprawling city ruins.

New Items and Buildings

Also being added are numerous new items and several new buildings. There will be two new types of items: magic staves and power-ups. Blizzard now has the ability to add cool down times to items, which means that instead of regulating powerful items by making them charged and consumable, you can now have items with an unlimited number of spell castings, but balanced by a cool down timer so you have to wait between uses. There will be a staff in the game, the staff of preservation, that can transport a unit back to your town hall, similar to town portal except your hero doesn't go with the unit. Each casting of the item sends one unit back, which helps you save a unit from certain death without having to remove all your units and your hero from play. But because of its cool down time, you won't be able to use it so rapidly in battle. Power ups are also being introduced to the game; these will simply be items that give you a benefit when you pick them up and then disappear before they can even enter your inventory. You might pass over a chest that gives you 500 gold, for instance, or a temporary buff spell.

There will be three very interesting neutral buildings added to the game. One is the Goblin shipyard, where you'll be able to buy naval transports. With the introduction of the Sunken Ruins tileset, and more island missions, Blizzard thought that it was time to have the ability to move your troops from beach to beach via ship transport.

Neutral Heroes

The second of the new neutral buildings

is the Tavern. It's like the Mercenary Camp, except here, you can buy neutral heroes! There will be five neutral heroes available for recruitment here. Blizzard revealed three of them, while the other two are still being discussed. The most fleshed-out of the heroes is the Dark Ranger, who is like the corrupted elven ranger Sylvanus Windrunner from the Undead campaign in Warcraft 3. This Dark Ranger will also be featured in the single-player campaign. Among her hero abilities will be silence, which is a spell you cast on spellcasters to prevent them from using magic, and black arrow, which is a perverted version of the Priestess of the Moon's searing arrows ability. With black arrows, the Dark Ranger will do more damage per shot, but if the target dies from the black arrow, it will rise as a skeleton under your control. Her ultimate spell will be charm, which is essentially mind control. Rob Pardo likens the Dark Ranger to a cross between the banshee and the



NEW NIGHT-ELF UNITS

The new Night Elf units include a welcome enhancement in the melee department. The new mountain giant is a hulking unit that is much larger than a tauren. At nearly 2000 hit points, it is a damage sink, able to absorb loads of punishment that would otherwise kill hapless Night Elf archers. The mountain giant also has a melee siege attack that destroys buildings quickly. So how do you ensure that other units don't just avoid the mountain giant and concentrate on your archers and casters? The mountain giant has the taunt ability, which when used, forces nearby enemy units to disengage from their current targets and attack the giant. It's the perfect way to save your troops, and with the giant's high hit points and armour, the giant will be able to stand up to the attacks while your thankful ranged units cut down the taunted units. But Blizzard doesn't intend for you to just crank out mountain giants thinking their high health and damage will make them ultimate units. They'll be expensive and very food heavy (around 7 food) and in toe-to-toe battles with other heavy melee units, like the tauren, they'll lose because they do siege damage and they cost more. The other Night Elf unit is still being mulled over, mostly because Blizzard concedes the Night Elves are so well-designed already, with no obvious holes that need fixing. The new hero, though, gives the Night Elves another alternative in melee battles. The Warden, who is also the focus of the Night Elf campaign, is an assassin-like unit with a very high melee attack but low armour and hit points. To help it in its role as a hit and run specialist, it will have the blink and fan of knives abilities. Blink is a short-range teleport spell that lets the Warden move anywhere within a screen's length. At higher levels it will be cheaper and easier to cast. With it, the Warden can move across rivers, teleport away from harm's way, or teleport in to make a quick attack. Fan of knives is an attack spell that does damage to all enemy units near the Warden. It has a damage cap and all damage dealt is divided among all foes in the area. If fan of knives does 500 damage and there are five units nearby, then each suffers 100 damage. If there are two units nearby, then each suffers 250. At higher levels, the ability will do more damage. It does not, however, have long range, so the Warden has to be close to use it. Her ultimate spell is called Spirit of Vengeance, and like the Human paladin's resurrection ultimate, it uses the dead bodies of your own units. It summons a huge, shadowy spirit unit that has high hit points and a devastating attack. And while it uses your dead, it doesn't consume their corpses, so they'll still be available for a friendly (or unfriendly) resurrection or animate dead spell.



Priestess of the Moon. There will also be a Naga hero available at the Tavern and for those who followed the April Fool's joke on the Blizzard website last year, a Pandaren hero named the Brew Master.

Race Specific Magic Shops

One non-neutral building that will be added to the game is the buildable shop. Each race will now be able to build a magic shop. Some of the items for sale there will be culled from the Goblin Merchant, but half of the items will be unique to each race. Those common items will include potions of lesser healing and mana, and town portal scrolls. But each race will also be able to buy a unique orb at their shop. The Humans, for instance, have an orb of fire in their shop, while the Night Elves have an orb of venom.

Each race's shop will have a different look and a different name. The Undead shop is called the Tomb of Relics, the Night Elf shop is the Den of Wonders, while the Orcs have the Voodoo Lounge. You'll be able to build the shop at the start of the game, but the items within will be regulated by the tech tree. The most powerful race-specific items thus will be reserved for the second and third tiers, after you've upgraded your town hall to the appropriate level. The aforementioned staff of preservation, for example, is a Night Elf item. They also get a moonstone, which will change day to night. The Humans get a mechanical critter, which can be used for scouting. You can move it as you wish, but if you leave it alone, it will amble about like a real critter and won't be auto-acquired by enemy units. Meanwhile, the Undead gain an item called the sacrificial skull, which is portable blight that can be laid instantly around an area when the skull is used. With it, Undead players can build defenses at an expansion while their haunted gold mine is still being summoned. Not to be outdone, the Orc players will get a portable great hall in item form, allowing them to expand more quickly than they can now. Of course, it will be at the very top of the tech tree.

As you can see, there are plenty of changes and incredible improvements in store for Warcraft 3. While some address certain problems in the game, most look like they'll simply make the game that much better. A beta for the expansion is slated to appear on battle.net in the next month or so, while the game itself is set to ship in early 2003. For millions of Warcraft fans the world over, that wait won't end soon enough.

Mysterious US-correspondent known only as "Elliott"



The Orcs will not be included in the new campaign

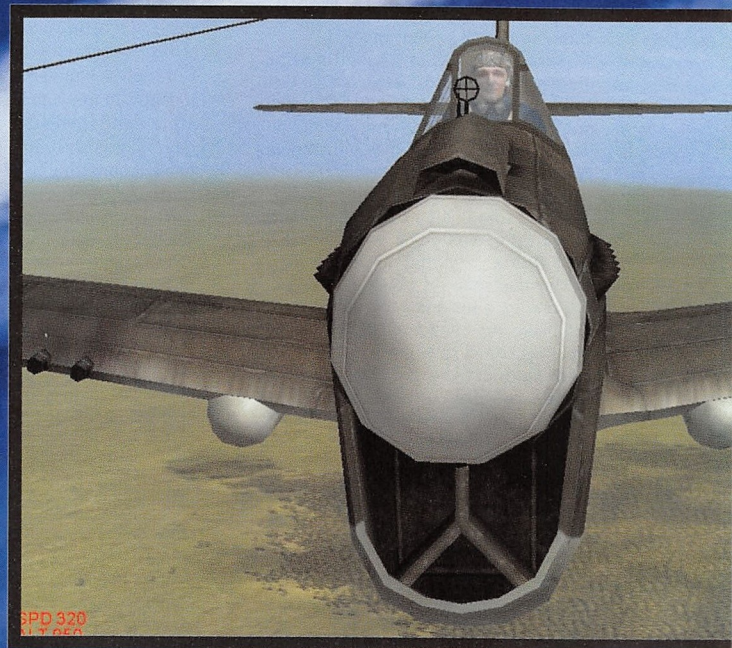
While some address certain problems in the game, most of the improvements and changes look like they'll simply make the game that much better



Chain healing (above) should give the Orcs a welcome boost

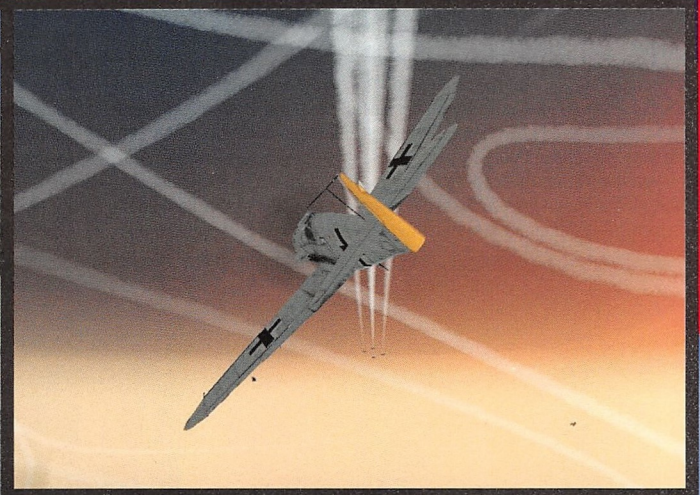
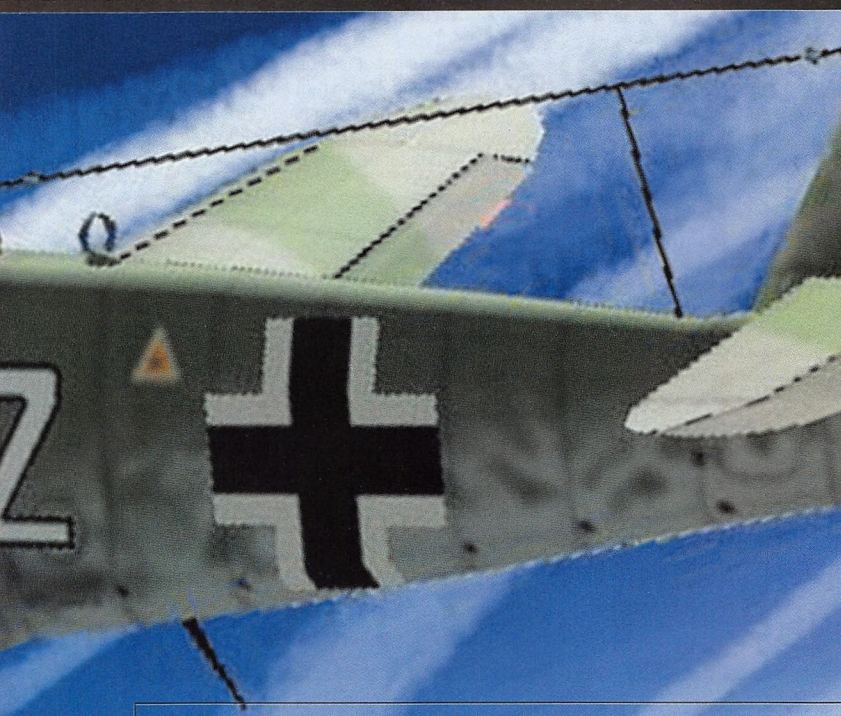
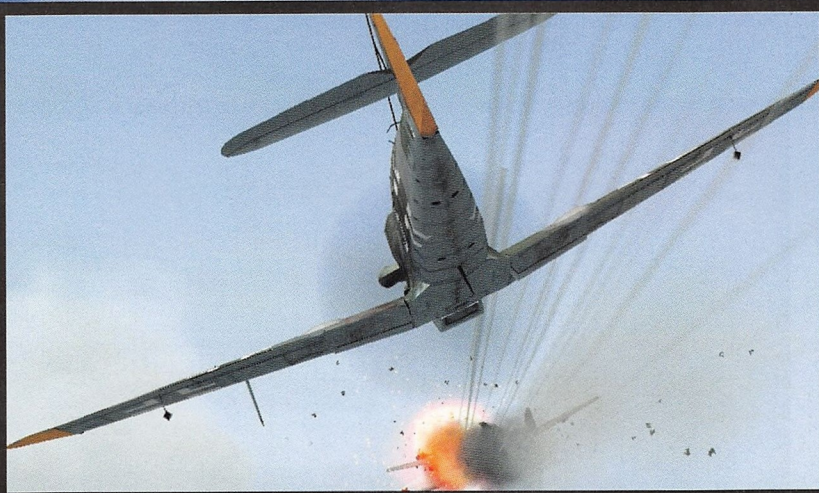


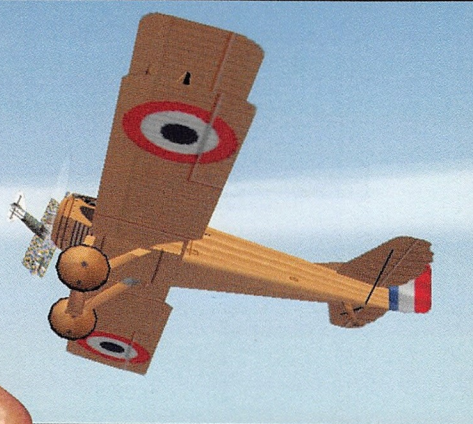
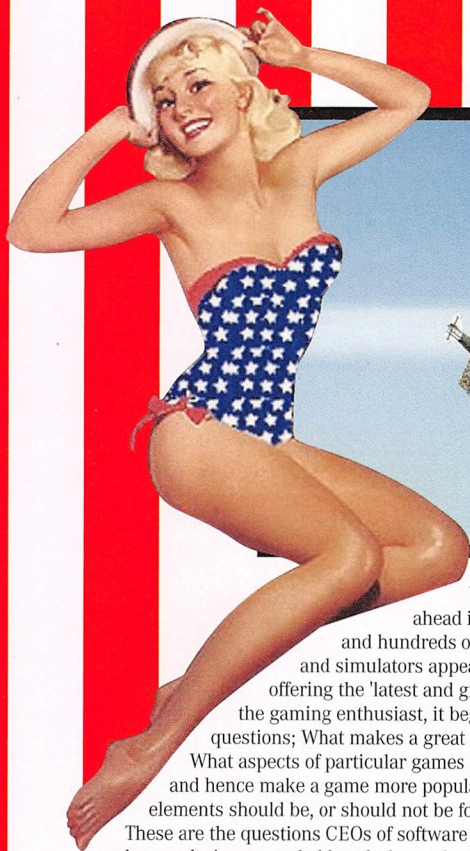
Flying high or flying low?



DOES FLIGHT SIMULATION HAVE A FUTURE?

***RESIDENT PCPP FLIGHT
SIM EXPERT AND
EDITOR OF COMPUTER
PILOT MAGAZINE,
DEAN BIELANOWSKI
TAKES A LONG HARD
LOOK AT HIS
FAVOURITE GENRE
AND ASKS: HAVE SIMS
BECOME A DEAD-
END GENRE?***





With technology racing ahead in leaps and bounds and hundreds of new-fangled games and simulators appearing every year, each offering the 'latest and greatest' graphics for the gaming enthusiast, it begs to ask the following questions; What makes a great game or simulation?

What aspects of particular games appeal to more people and hence make a game more popular than the next? What elements should be, or should not be found in future titles?

These are the questions CEOs of software development groups and game designers probably ask themselves every other day. To draw in publishers and attract gamers, which inevitably means more dollars for the team's pockets, developers must not only follow the trend of current gaming titles, but must also seek out new ways of attracting a larger audience to improve overall market share.

Today we will focus on the realm of flight simulation titles. Some may argue that this particular genre falls outside of the 'mainstream' gaming realm, however, when you consider that titles like Microsoft's Flight Simulator series is still the biggest selling series of 'gaming' software ever, one may argue that the flight simulation genre falls well into mainstream gaming circles by virtue of sheer numbers sold.

There is a significant difference between flight simulation titles and your run-of-the-mill Quake or Counterstrike clones. Flight simulation titles attempt to mimic real world events, operations or tasks. Many other games could be collectively grouped as Sci-Fi thrillers; games that go beyond realism and explore the minds of the developers themselves. Such games are not limited to the realities of the world around them and do not have to contend with pre-existing rules or regulations.

There are no boundaries with Sci-Fi games and the producers make the rules, build the world around you and immerse yourself into an 'unrealistic' environment. Such immersion and exploration of the unknown is certainly a major selling point for such titles and a driving force behind their success. These games can continue to evolve endlessly as the boundaries are only as small as the imagination of the game's coders.

All About Realism

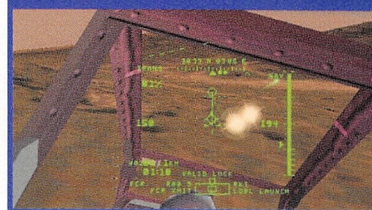
Flight simulations on the other hand are based on 'realism', a term that is often thrown around but never fully explained. In its simplest form, realism may be termed as something that mimics another thing already present in everyday life. General/Commercial aviation simulations attempt to mimic the actions and operations of current and past aviation endeavours and practices. As such, many are bound by the rules that currently exist in the aviation world to entice the

OUR BOYS IN EAW
SORTIE OFF FOR
ANOTHER MISSION



Longbow Anthology

Jane's premier helicopter battle simulation. Still widely used and still one of the best on offer. It offers a solid simulation of airborne helicopter warfare and has not sacrificed the element of strategy to achieve this, unlike some new helicopter combat sims.



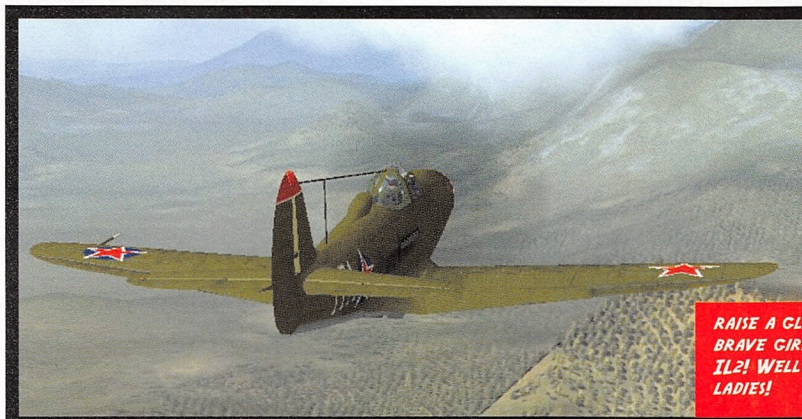
public to purchase the sim which is 'As Real As It Gets' - the marketing slogan of the Microsoft Flight Simulator series.

Combat flight simulation titles often allow the virtual pilot to re-live historic air battles, which are again, loosely based on historical data and bound by rules that limit the boundaries of the evolution of the genre. Developers in the flight simulation arena are forced to come up with new ideas and new features to attract a greater audience while constantly battling with the reality of meeting the boundaries of a realistic flight environment. It is certainly a challenge this writer is glad he doesn't have to contend with.

To further explore this concept, we need to take a look back into flight simulation software history. Like most any game from way back, flight simulators began as wire-frame graphical simulations of flight. Because of the nature of flight simulators, they relied heavily on mathematical processes to simulate aircraft physics, display instrument gauges and render the world outside of the flight deck. The flight environment

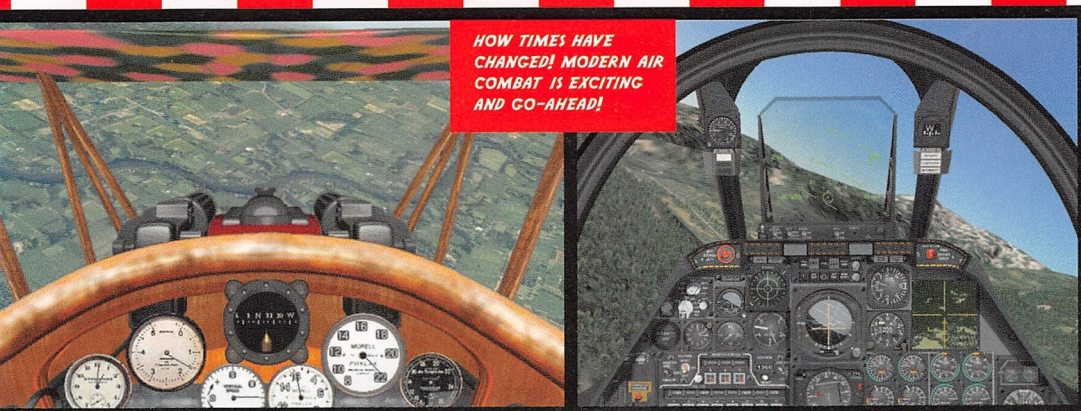
required a 3D world in which to realistically operate, compared to say the 2D view of old games like Pacman and Pong! Oh boy, we are going way back now.

As a result, early flight and combat simulation titles had a limited 'world' in which to operate. It was hard to get excited about such flight simulation titles back then, unless of course, you were a die-hard aviation or combat jet fan. The realism factor of the simulation also limited the genre to a niche market. Every aviation enthusiast would probably have a copy of at least one flight simulator on their computer, but how



RAISE A GLASS TO THE
BRAVE GIRLS OF THE
IL2! WELL DONE
LADIES!





would developers and publishers manage to attract the mainstream gaming public?

Early flight simulation titles were marketed and sold by tempting gamers into the fascination of flight. There is no doubt that even as kids, when you heard that DC-3 or 747 or even that F-15 jet fly above you, you gazed into the sky for minutes on end, watching it as it flew past. You probably wondered how it gracefully sat up in the sky, then wondered what it would be like to fly it! This same fascination still exists today for people young and old, and flight simulation titles offer the user the chance to fulfill that dream, albeit virtually. Flight simulations have survived over the years by 'selling' this very point.

Evolution At 30,000 Feet

Flight simulators slowly evolved through the early years of home-based gaming, going from wire-frame graphics to 3D coloured and textured objects in a relatively short period of time. As raw computer speed and hard drive space increased, so did the potential to include more detail and more realism into the titles.

It could be said that flight simulation titles were, for a long time, somewhat limited by the speed of the machines that ran them. There was always the opportunity to create realistic simulations of aircraft and airliners on a functional systems-basis, yet the technology was not there to create a realistic visual world to accompany it. It was not until sims such as the Falcon series and Microsoft Flight Simulator 5, did more mainstream users start latching on to the flight simulation genre.

This was likely because the transformation from 'old to new' really started to show around the time. Graphics in particular were vastly improved in all genres of gaming. In the flight simulation arena, where is it more important to display the best graphics possible? If you want to simulate real flight, you need a real flight environment. Sales of this new breed of flight simulators skyrocketed to almost astronomical levels.

Were graphics the key to a successful flight simulation title? Was this the answer to the problem of attracting more market share for the genre? The new question was posed; Is it more important to portray a realistic feel of flight in terms of aircraft physics and aircraft models, or to develop a more realistic world for these models to fly within?

It was not really necessary to attempt to attract the die-hard simmers anymore. They would naturally follow along with the evolution of the software, basking in all the great new features that each endowed upon their virtual flight world. At this point in time, the focus turned more toward improving the visuals of the simulators. You

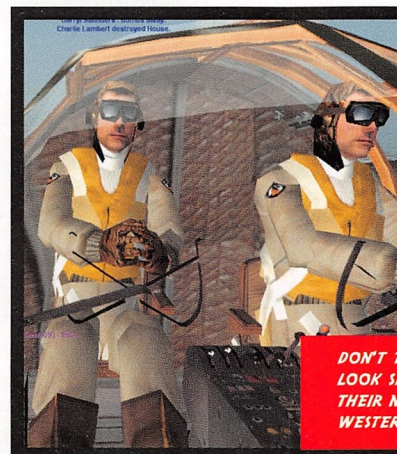
could build the best simulation of an aircraft in the world, but if it means you would need a real-world pilot's license to fly it effectively, then you would dramatically decrease your sales potential.

The focus needed to be on improving graphics to make the sims more 'attractive' in more ways than one. A balance between achieving improved realism and not allowing the simulator itself to become too complicated was being maintained.

The advent of the 3D accelerator gave rise to some really great looking flight simulations. Combat sims like TFX, Jane's F-15 and the Longbow series introduced the 'wow' factor to many mainstream gamers, who soon became dedicated flight and combat flight simmers as a result.

This new graphical miracle heralded the beginning of effects that rivalled the top firstperson shooters of the day, further improving the genre's status in the gaming market. New online and LAN squadrons started popping up everywhere as the evolution of the Internet was also becoming more commonplace in the gaming arena. Several flight sim titles headed down the arcade path, offering more shoot-em-up action instead of solid, realistic flight models and strategic gameplay. These were quickly picked up by action and arcade gamers, but just as quickly shunned by hardcore flight simmers.

Business was booming and the genre was often treated to 4 or 5 new flight simulators each year for a period afterward. Flight Simulator 98 was one of the biggest sellers ever and one could download literally tens of thousands of third party add-ons for this title freely off the Net, expanding the simulator beyond anyone's wildest dreams. Terminal Reality's Fly! general aviation simulators offered some competition to Microsoft at the time and helped shape things for the future.



Holding Altitude

It was, however, at a point around the end of the year 2000 that something seemed to back flip this trend in flight simulation popularity. This is not to say that this genre has lost any popularity, certainly not, however, it has seemed to plateau a little where other mainstream genres, particularly first person shooters and online multiplayer games have boomed.

We have also seen a drop in the number of new flight simulation titles in the past 2 years. It would be impossible to single out the major factor contributing to this. We can only speculate on the possibilities. Either the market became flooded with sims causing market-share to be

FLIGHT SIMULATOR 95

One of the first General Aviation sims to transition from a basic 'coloured' world, to a textured world. Also marked the beginning of extensive 3rd party development with the release of BAO's Flight Shop program. A definite milestone in the history of general aviation simulation on the PC.



RED BARON 3D

A classic sim by virtue of the solid WWI dogfighting realism it presents. Forget the HUD, chaff, flares and radios, this is real aerial battle and the birthplace of aerial tactics. Also had Awesome graphics (for the time) and flight models polished off the package.

JANE'S F-15

A solid simulation with 3DFX-backed graphics and effects. Reasonably detailed aircraft, solid system functionality and immersive radio communication and dogfighting/bombing environments. Like many Jane's titles of the time, it offered a quality simulation for the PC power of the time.



FLY! I AND FLY! II

These two general aviation sims published by Terminal Reality and GODGames offered competition to Microsoft's reign at the top. Unfortunately, they never caught on to the masses, for reasons that are still debated. One possibility is the scenery rendering. The simulator offers excellent aircraft functionality, much greater than Microsoft's simulator but visually, it didn't stack up. Fly! continues on, but for how long we will not know.

X-PLANE

This general aviation sim has been around for many years but is still very much a work in progress. The sim is updated almost every other week and enjoys the highest rate of development ever seen for almost any game, sim or PC application. Offers very realistic flight models but is still lacking a little in the scenery and visual department compared to its competitors in the arena.

OH GOOD SHOT SIR!
ANOTHER BLIGHTER
BITES THE DUST!



FLIGHT SIMULATOR 2002

The most widely used general/commercial aviation simulation for the home PC user. FS2002 enjoys a huge portion of the market share (over 90%). It's open architecture, world flight environment, souped-up graphics and improved performance over previous versions have made it a sure-fire winner. Secure in its fame, until the next version in the series is released of course!

distributed across a greater number of companies resulting in reduced profits or the fact that there simply wasn't enough market to go around.

We know for sure, that on both the general aviation and combat flight simulation front, Microsoft has dominated for many years. Microsoft Combat Flight Simulator series has stood the test of time. I would boldly say this is due most in part to the open architecture of the sim. Allowing the end-user to fully customize most aspects, build new aircraft, new scenery and new missions to further expand the game. The same can be said for Microsoft's general aviation simulator, and to an even greater extent. Recent history has dictated that sims with open architecture are more likely to succeed than those without it. The Internet has made it easy to share files with friends and fellow enthusiasts, and developers are cashing in on this fact.

There do seem to be two main types of flight simulation enthusiasts though. One type are the realism fanatics. No matter what, if the sim is not realistic, it is no good. The other type are a little more mellow and don't mind a little 'make-believe' appearing here and there. Space combat sims like Descent Freespace, X-Wing and many others often appeal to this group. If we look at some of the flight simulators in

wouldn't want to be Luke Skywalker blasting some dorky-looking white drones in souped-up space dragsters (Dean is not a Star Wars fan - Ed)! Can titles like X-wing really be classed as a simulator if they are simulating something that isn't 'real' to begin with? Let's leave that thought with the thinkers among us.

Falcon 4 still enjoys a huge following, even though the sim itself graphics-wise is really ancient. It is the realistic aircraft or dogfighting simulation that keeps people in the Falcon 4 skies. Much the same can be said for the other titles listed there, although some are now being superseded by the new breed of simulator beginning to emerge.

Changes Needed Captain?

This brings us the crux of this discussion. If the flight simulation genre has reached a plateau, what must be done to keep it heading in a positive direction? How will it compete with other mainstream games that are proving successful? Let's take a quick peek at several of the latest simulators and see what they are offering and perhaps that will unlock the key to the developers direction in the genre.

IL-2 Sturmovik - This recent WWII combat sim offered perhaps the best flight model and flight physics re-creation since Falcon 4. Built from the ground up with realism in mind. The focus was certainly on achieving

the most realistic portrayal of WWII aircraft and dogfighting possible. Improved graphics, new explosions and environmental effects made it a sure choice for any combat sim connoisseur.

Microsoft Combat Flight Simulator 3

Initial performance issues clouded the release, but CFS3 introduced 2 new features to the combat flight simulation scene. A dynamic campaign system that changed

FALCON 4

After many years, Falcon 4 is still the virtual Top Gun's weapon of choice for simulated jet fighter combat. The graphics may not be state of the art in today's terms, but the level of realism and multiplayer capabilities have stood the test of time. Third party service packs have really improved the level of simulation in recent years.

history that have proven themselves to be more popular than the rest, we find titles like: Red Baron 3D, Falcon 4, European Air War, Apache Longbow and X-Wing.

Flight Simulator 98

It could be argued that X-Wing makes the list by virtue that it is a Star Wars spinoff. And of course, who



CAN HIS VOODOO?
HANDLE THE
PRESSURES OF
MODERN LIVING?



EUROPEAN AIR WAR

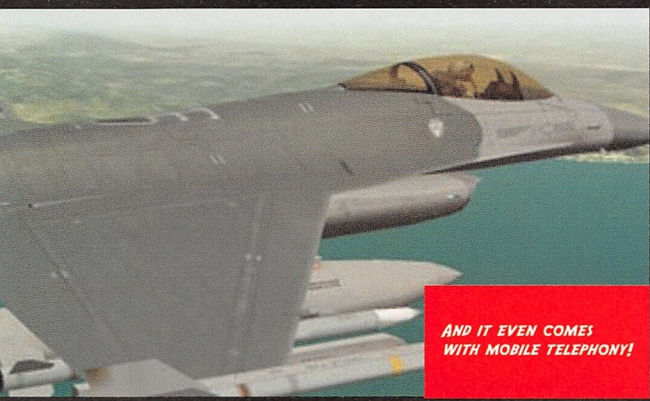
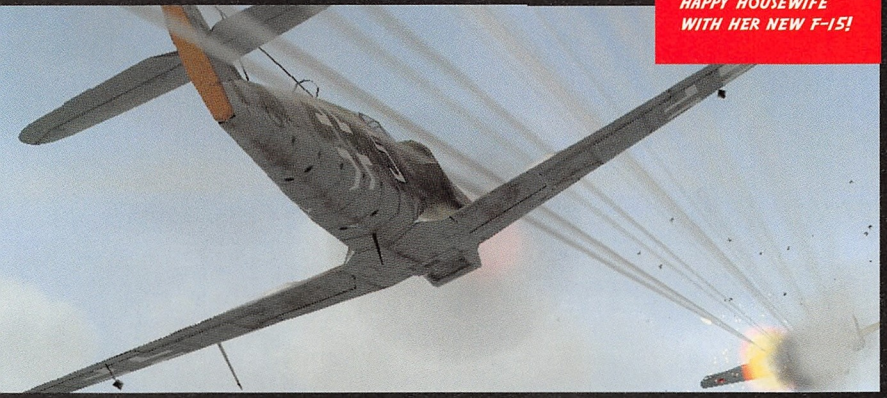
Interestingly enough, EAW still rates highly among WWII combat flight simulation fans. It was used widely as the sim of choice for LAN squadrons. Recently, however, IL-2 Sturmovik seems to have taken over. EAW offered well rendered and realistically modeled aircraft and still pulls quality screenshots that rival even the latest WWII sims.



HERE'S ANOTHER
HAPPY HOUSEWIFE
WITH HER NEW F-15!

STAR WARS SIMS

Slap on the Star Wars logo and you are almost guaranteed a winner (in the earlier days anyway). X-Wing, B-Wing and X-Wing Alliance gave Star Wars fans the opportunity to re-live the movie. Graphics were excellent for the time. If the sim mimicked the movie, then it was 'realistic' no matter what direction of thought you took on the matter. And of course, no one wants to be arguing with a devout Star Wars fan now, do we!



AND IT EVEN COMES
WITH MOBILE TELEPHONY!

little unbelievable, however, it does offer graphics akin to the latest first person shooters and 3D games.

Microsoft Flight Simulator 2002

The most widely used general aviation simulator to date, except for commercial real-world training applications.

This sim, like its predecessors in the series offers the entire Earth to explore, all in real time.

Much focus was placed on improving the eye-candy of the sim and implementing the Air Traffic Control features. Some say too much eye candy improvement and not enough flight model and handling improvement, yet both are essential to obtaining 'realism' in any flight simulator software. Huge following due to open-architecture and it enjoys over 90% of the general aviation simulation market.

X-Plane

Perhaps the only remaining competitor to Microsoft in the general aviation field. X-Plane was originally created to build and test flight models for real aircraft and offers output of technical data suitable for the task. Used by Boeing and NASA at various stages for flight model and component testing. In recent years, the core program has been transformed into a fully-fledged flight simulation program. It has attracted an audience of die hard simmers by nature of its realistic flight modeling features, but seems to be shunned by the majority due to its rudimentary world scenery on offer. This aspect is improving rapidly however.

Lock-On: Modern Air Combat

This title has yet to be released but by first looks, is set to replace Falcon 4 as the premier combat jet simulator. Offering photorealistic graphics, a flight

environment that is hard to believe

and some of the best looking aircraft ever made, LOMAC will surely deliver on the graphics side of things. If it can provide the accuracy and realism of jet combat, then it will surely become a classic.

There Are No Secrets...

So going by the above, have we unlocked the key to the developer's future directions in the genre? Strangely, no! There does not seem to be one uniform direction the developers are taking to attract a wider audience or to tackle the competition. Remembering that this genre is bound by realism, the only thing you can improve upon is realism itself.

This means improved graphics moving towards photorealistic textures, better flight models and more functional flight decks and cockpits, simulating procedures for both types of sim and adding in all the little things that today's powerful computers can now allow. Improved terrain rendering has been a high priority in recent times with use of digital elevation models, however, this again is all apart of the realism factor.

CFS3's dynamic campaign system is perhaps one of the few items you could argue is not realistic. Sure it offers realism in the fact that the outcomes change based on successes and failures (as they would do in real life), but as a result, this potentially leads the war into an outcome that was not realistic historically.

The problem flight simulation has as a genre, is that it can never be 100% realistic. The genre is fighting a battle they can never win, in theory. Full realism would mean actually flying the real aircraft in the real world! The battle they will win however, is providing the opportunity to millions of people worldwide to take the seat of a P-51 Mustang and battle with BF-109s over Europe in complete safety with unlimited virtual lives.

They offer the general aviation enthusiasts a chance to pilot a 747 Jumbo from Sydney to Los Angeles in real time with realistic flight plans, navigation and weather and so much more. In essence, you cannot compare flight simulators to first person shooters or other sci-fi games. This is comparing apples to oranges. Any simulator, whether it be a flight simulator, a racing simulator or a sport simulation is in the business of simulating - simulating real life events. There is little room to go beyond this boundary, but there is still a very long way before we will reach that boundary.

Reaching For the Skies

Flight simulators will continue to survive despite the fancy weapons, imaginative worlds and new-age effects inherent in mainstream games. Simulations are rarely in direct competition with mainstream games by virtue of the inherent differences stated above. Just take a look at your TV set these days. There are more real-life shows on then ever before. Just as there will always be a desire to immerse yourself in a fantasy universe, there will also be the desire to be Michael Jordan in a basketball sim, Micahel Owen in a soccer sim, the Red Baron or Maverick in a combat flight sim and a desire to captain your own light aircraft or heavy jetliner in a general aviation simulator. The flight simulation genre is here to stay, and as long as computer hardware improves, so will the quality and realism of our flight simulators. A little healthy competition certainly does not go astray either! ■

based on your successes (or failures) as a combat pilot and a 'What If' scenario. What if the jet powered Me262 fighter was more active during WWII? Microsoft included elements in the sim that were not historically accurate in order to spice the title up a little. Was this a ploy to attract a wider audience? Perhaps to lure more mainstream gamers? CFS3 certainly offers some of the best graphics going around for a flight simulation, but lacks a little in the aircraft and flight model department. Definitely a sim that has pushed the arcade factor a little more than any WWII simulation to date.

Comanche 4 - The publishers claim it is realistic, but after the first few missions, it is evident that this title is definitely an arcade helicopter battle sim. The campaign story is a

IL-2 STURMOVIK

Build it, and they will come. IL-2 Sturmovik is the current sim of choice for WWII combat fans. While Microsoft's CFS3 is challenging for the top spot, Ubi Soft's IL-2 Sturmovik easily surpasses CFS3 in the flight model realism department. IL-2 was built from the ground up to be realistic whereas CFS3 was built with marketing to a wider audience in mind, and it shows.

Whats HOT In 2003

2003 is set to be a **BUMPER** year for gamers and QV Software have released a number of new titles that will keep you busy playing into the wee small hours, night after night. No matter what your favourite game genre is, we are sure to have something to keep you busy....



BALLERBURG

BALLERBURG TAKES YOU BACK IN TIME WITH A STORY FILLED WITH HUMOUR, FORTRESSES, QUEENS, GUNS AND INTRIGUE. IF YOU THINK BEING A KING IS A FUNNY JOB YOU HAVE ANOTHER THING COMING.

CHECK OUT OUR WEBSITE TO DOWNLOAD A PLAYABLE DEMO - IT WILL GET YOU HOOKED!

Cossacks: Back To War

Containing all of the gameplay features of Cossacks: European Wars and Cossacks: The Art of War, this is a complete care package for all current and future Cossacks fans. This add-on contains 100 captivating missions taking place between the 16th and 18th centuries. You don't need the original to play - it's stand alone!



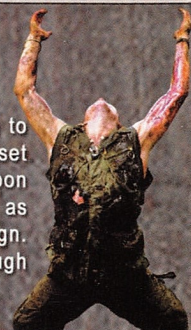
New World Order

Strike back. In the near future, terrorist factions known as The Syndicate are becoming increasingly successful in creating havoc in the world. You are a member of the Global Assault Team. It's your job to track them down and wipe them out.

Featuring some of the best graphics yet seen in any first person shooter, heaps of weapons, per pixel damage model and more...

PLATOON

All the excitement of the big screen is finally coming to the small screen in Platoon, the first action RTS set during the Vietnam War. Control an entire platoon through missions based on historical events such as Operation "Shiny Bayonet" and the Pleiku Campaign. Take part in one of the world's most intense wars through its most legendary war movie - Platoon! A Playable Demo is Available from our website!



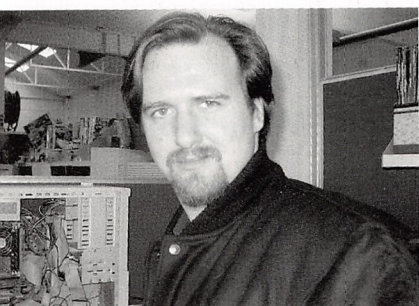
And the latest and greatest does not end with just the 4 new titles above, we have many more new and exciting titles including.... **DINO ISLAND, AGASSI TENNIS GERNERATION 2002, AIRLINE TYCOON EVOLUTION, DIVINE DIVINITY, JERUSALEM, MONSTERVILLE, THE SECRET OF THE NAUTILUS, BIG SCALE RACING.**

But wait, theres more... **THE PARTNERS, MICRO COMMANDOS & AMERICAN CONQUEST.**

IN REVIEW

THE MOST AUTHORITATIVE REVIEWS AROUND

GAMES



Although you would never know it judging by the attitudes and activities of numerous online kiddies, as gamers we are actually an intelligent bunch of people. Nay, make that an intelligent bunch of creative, highly imaginative people that don't just fantasize about strange new worlds and civilisations, but rather, we inhabit them.

Fellow gamers, our presence is being felt and we are most definitely having a profound affect on the entertainment industry as a whole. It was whilst having the honour to attend a preview of Star Trek:

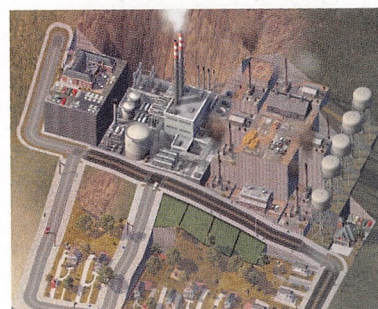
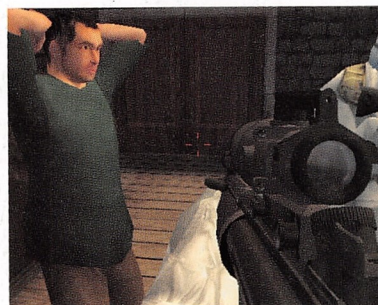
Nemesis that the reality of the previous statement really hit home. For way too long myself and other like-minded gamers have become more and more frustrated with the action elements of movies. Take any kind of combat in space be it large scale capital ship battles or small fighter skirmishes and if you're a gamer there's a very good chance you will scoff at it or simply find it trite.

Why do we do this? Most likely because many of us in some way or another have been a captain or pilot of these kinds of vessels in numerous games and have a far greater understanding of the physics of advanced starships (that would be Newtonian physics free starships, you know, easy to stop). Of course it's all theoretical but let's face it, games like Freespace 2 and Independence War are often referred to as "Space Sims" and have taught us about the very dynamic and tense nature of battles in space. But more importantly, these games fleshed out the physics, the combat and simulated a far more believable universe than what normally spews forth from the limited understanding of writers.

Which brings me back to Star Trek: Nemesis. Without spoiling the movie I can reveal that ship to ship combat is not the staid, boring "two ships menacingly facing each other" kind of affair that has become way too common place. Instead it is obvious that a healthy diet of Starfleet Command and Bridge Commander games has further opened up the imaginations of directors and writers. In Nemesis it is a delight to witness the exchanges of fire between ships, particularly when you hear the frenetic commands of a captain under siege calling for evasive manoeuvres to direct weapon fire onto less damaged shields.

How ironic that in the nineties developers busted a gut to try and incorporate plenty of cutscenes into games to give them a greater cinematic feel. Now, in the noughts, it's the other way around with movies incorporating what we've learnt in our games. Ahhh, progress...

Jere Lawrence
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THE PCPP REVIEW RATINGS SYSTEM



90+	Gold Award. A classic, everyone will love this game.
89-80	A strong title that's hard to fault. But perhaps not the best in its field.
79-60	Competent and playable. For fans of the genre.
59-40	Decidedly average, probably boring.
39-0	A dog. Bad, shamelessly unoriginal, cheap and horrible. Avoid.

Need	The minimum requirements for playable speed.
Want	The ideal system requirements for the game.
For	The major reasons why you'll like the reviewed game.
Against	The major reasons why you won't.

Raven Shield

Developer: Ubisoft Canada ■ Publisher: Ubisoft ■ Distributor: Ubisoft ■ Price: \$89.95 ■ Rating: MA ■ Available: March

Open and flash, GO! GO! GO!



Jazzercise won't save you now!



Looks like we got ourselves a convoy



SYSTEM

NEED

600Mhz+ CPU
128MB RAM
32MB Videocard
2GB HDD

WANT

Intel P4
512MB RAM
32MB Videocard
2GB HDD

MULTIPLAYER

Yup



When the extremely popular author Tom Clancy isn't writing intricate details about how a bullet passes through the human skull, complete with graphic descriptions of the exit wound, he can often be found assisting developers on conversions of his famed novels to

computer games. Raven Shield however, the third in the Rainbow Six series of games isn't based around any novel but instead offers a whole new scenario.

The year is 2005 and the opening video doesn't give away a lot but rather plays the "War on Terror" card. That's to say the scenario is a world where terrorist attacks happen regularly and a new type of solution is required to quash the threat. That solution would be Rainbow Six, a United Nations formed anti-terrorist group that you take lead in an effort to make the world safe again. This isn't an action first person shooter though but a moderately paced, highly playable simulation of squad based combat that requires a lot more from you than just quick twitch reflexes.

Mission Briefing

Although mission planning and micromanagement of your teams has always been a major part of a Red Storm/Tom Clancy game, in Raven Shield the entire process has been made simpler for more action orientated players through the use of the Quick launch mission icon. This isn't necessarily the best way to play the game as it only launches the mission with you and a team of three others even if you were given command of two teams. This aspect of the game may not appeal to some players who just want to get into the thick of the action but the reality is that selecting some extra soldiers isn't too tough and the planning interface, although amazingly comprehensive, can be used simply without too much straining of grey matter.

Actually it's worth getting used to the idea that everything in this game is going to be comprehensive because even a simple mission briefing is given the full

For those who loved Rainbow Six or Rogue Spear, or who are patient enough to achieve gaming gratification, Raven Shield will appeal

treatment. I can't confirm if Clancy wrote the mission structures in the game but it wouldn't be surprising given the extraordinary amount of detail in each one. Starting with the standard briefing from an admin officer of Rainbow you quickly notice five clickable names associated with the mission. After the obligatory 45 second speech a quick click of another name, say John Clark or Kevin Sweeney (fans of Clancy novels will recognise the names) presents another >45 second presentation offering someone else's opinion and advice regarding the operation. For those with waning attention spans (hello!!) this can get a little tiring and cumbersome but at the same time you realise there are others out there that love every aspect of this kind of information minutia. Another point worth raising about mission briefings is that the full motion video is extremely well done and very professional with a slick, but not stupid, Hollywood flare to them. Briefings are visually entertaining and help to set the mood of a tight military operation.

But I wanna be on Red's team

Preparing for a mission involves assigning a finite number of soldiers to any of three teams: Red, Green and Gold. The way you

form your teams will depend on the kind of strategy you want to employ in the planning room as each team can consist of one to four soldiers of differing classes. Available are elite soldiers (standard assault), recon, sniper, demolitions (great for blowing up locked doors - especially when enemies are on the other side) and electronic specialists (hackers) who are handy for deactivating systems

If you're the master strategist and are only assigned four soldiers, you might decide it's better to create two teams, one to

ATI ADDITIONS

Those with an ATI Radeon 8500 and above will be pleased to know that Raven Shield features a number of enhancements. These include: custom code for "projected textures" such as bullet holes, blood and shadows so that they're calculated fully in hardware and "hardware cube mapping" for effects such as reflections on windows. By far the nicest enhancement is Truform which allows for the character settings to be set to low, reducing the load on the CPU but when rendered still have the appearance of a high res/high poly model.

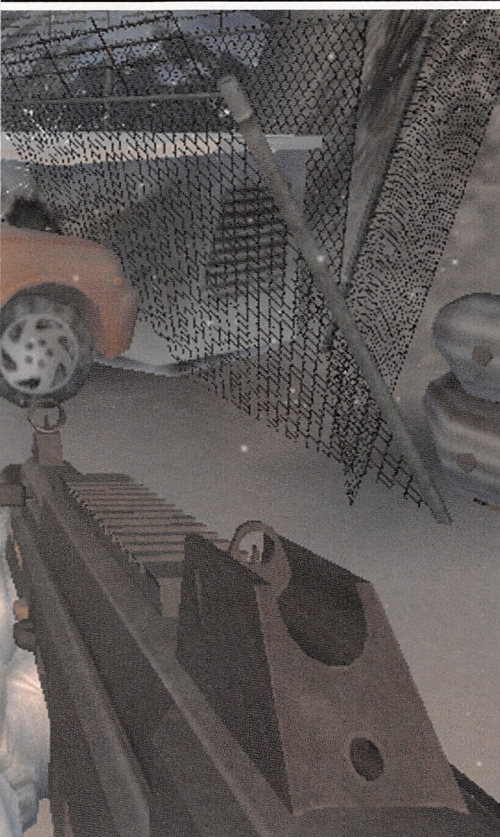




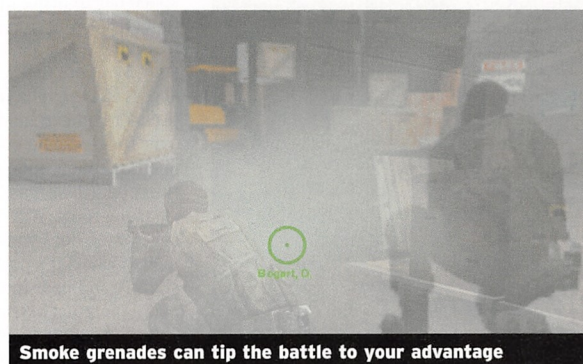
be the main infiltration unit plus yourself and an NPC as backup. Alternatively you could play the more gung-ho approach (hello!!) and make a team of four and attempt to take the objective by pure force. The choice is yours.

Now that's what I call a plan

Depending on what you're after in a squad based tactical game the planning interface will either be your most beloved treasure or your worst nightmare. From this part of the game you have control of every team and can direct them in every one of their abilities bar none. The interface is entirely GUI driven and represents every action with an appropriate icon. Based on the location of a waypoint a number of actions can be assigned to the team such as carrying out an infiltration blitz or directed to move cautiously through an area. Being contextually sensitive, if you were to place a waypoint at a door it's possible to then add further



instructions such as ordering your team to "breach and grenade" (smoke/gas/fragmentation) or direct them to take up sniping positions in the upper floors of a



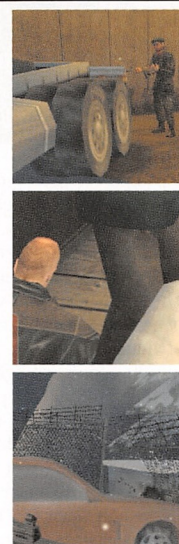
tower. For non-twitch, purely tactical armchair commanders there's even the option to create the path and order structure of every soldier and then watch the outcome without any player input at all.

Terrorists lose

The squad selected and plans made, it's finally time to enter the game. The first thing that will strike you in the action component is that the levels are really very large. This is compounded by the fact that although each level can be approached linearly there is still enough "freeform" exploration allowed that it's possible to take a wrong turn and end up at a dead end. Still, this isn't to say that you often find yourself lost but rather requires use of the in-game map and a bit of pre-planning to ensure more fluid passage. As

explained earlier, the route around a level can be learned rather quickly but as there is no mid-mission save function, lessons are learnt the hard way and missions need to be re-attempted quite a number of times.

Although engaging the enemy is often very simple and with good uses of stealth you can generally maintain the upper hand on terrorists there are numerous situations, such as where



SKILLS

It would be unfair to say that RPG elements are once again creeping into our games as the Rainbow Six series has always featured stats to track the soldiers available for the team. Raven Shield is no exception and the skills available for team members are: Assault; Demolitions; Electronics; Siege; Stealth; Self-Control; Leadership and Observation. Obviously soldiers will gain in experience and raise their skills from mission to mission which means that if you want to succeed you have to keep your team alive to become more efficient killing machines rather than just using them as cannon fodder to get through the game.





Night vision = dead terrorist



A quick stop in the loo

hostages are involved, that the pace really quickens and you need to be on the ball to succeed. To assist in situational awareness, a number of very cool items are on offer to use amidst the action. These include night vision goggles and a heartbeat sensor. Night vision goggles are obviously handy when in a dark area but blinding in direct light. The graphics engine handles this part of the game brilliantly with light sources that flare wildly from exposed light and full whiteout from direct or external lighting. The heartbeat sensor is a pair of goggles that when worn will display blips that represent the heart beats of people in the area and are invaluable when gathering intelligence before breaching a door.

Door breaching is handled extremely well in Raven Shield and is the action

highlight of the game. To make ordering easier, an interface function referred to as "the command rose" makes for an intuitive way of conducting orders. When the action icons appear (such as open door, climb ladder) you can hold down the space bar to bring up a command rose that allows you to issue orders to your team. For example, at a door you may start by using the heartbeat sensor to assess if anyone is inside. If a threat is present you can hold down the space bar over the door and command your team to open the door, open the door and grenade the room (flash/gas/frag) or open and clear the room. Alternatively you can control the door yourself and by using the mouse wheel it's possible to open the door slightly and peer in or just kick it down and go in guns blazing. Controlling the team through the command rose works well but quick taps of the space bar will also allow for fast ordering such as sending your team ahead or telling them to hold an area. For those that have created complex plans in the planning stage each unit can be ordered to progress to their next waypoint with the press of a key that makes ordering multiple squads easier.

Combat

Like in other Rainbow games, combat doesn't involve running around shooting everything as your avatar and squad mates are all weak and can be downed by a well placed shot. There are also a number of factors that affect combat and your gun reticle. Run and the reticle will expand spreading the fire around a greater area but stand still or lie prone and the reticle will become tighter and allow for more accurate fire, a process similar to Deus Ex.

To avoid walking into an ambush (an inexperienced player's common mistake) another very handy function has been added to allow you to peer around corners. By holding the control key down the game goes into a virtual posturing mode where you can gradually lean around a corner

and avoid detection. Although in single player mode it was often more effective to just send the squad into an unknown area first, in multiplayer games virtual posturing is going to really appeal, especially to those that like to snipe.

Weapons are all very useful and being realistic, most enemies can be killed



This street is suspiciously clean



There! I callously stain your fine polished floorboards!

MULTIPLAYER

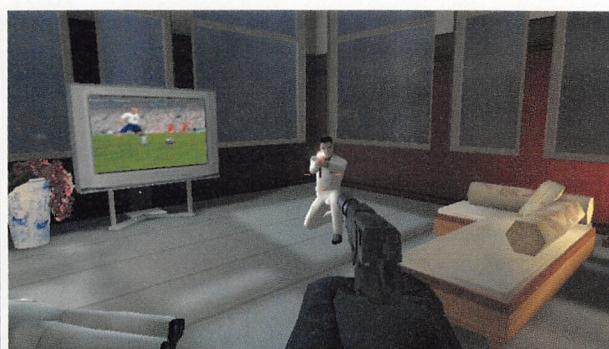
A largely touted aspect of Raven Shield is the multiplayer component which we were unfortunately unable to test due to the fact that the game hadn't been released at time of writing and there were no servers to join. The number of weapons along with intricate levels and utilities such as heartbeat sensors, night vision goggles, virtual posturing and thermal gun sights could make for a very large carrot to attract Counter Strike players. Undoubtedly Raven Shield will develop a strong Multiplayer following but it remains to be seen if it can topple the mighty Counter Strike.

with a minimal amount of fire (well, it only takes one bullet). The weapons are all well rendered replicas of modern day military firearms but there are some nice surprises. For example, if you reload a weapon that has been completely emptied you will only have as much ammo as the next clip. If however you change clips before the gun is empty you will have the new clip of ammo, plus the previous bullet that's left in the firing chamber. Now that's some cool attention to detail.

The warfare is unreal

Utilising the impressive Unreal Warfare engine which drives the processor and graphic card intensive Unreal Tournament 2003, Raven Shield has the advantage of offering a high res, well rendered environment but without the necessary penalties of UT2003. This is because there simply isn't the same kind of frenetic activity going on in Raven Shield. Basically in UT2003 your CPU has to be constantly calculating the location of numerous bots as well as the hits and misses for the battles that wage around you. Raven Shield being a far more stealth oriented game means that you move slower around the map which is good for frame rate but the other reason for superior framerates has both good and bad points.

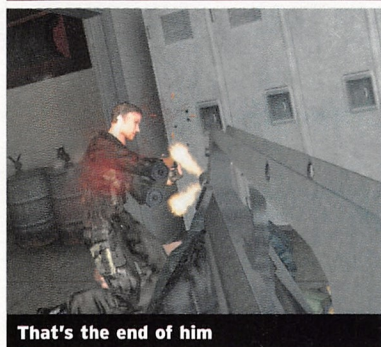
The bad is that frame rate is stable due to the fact that the terrorists really don't move around much in the game but instead tend to stand around waiting for you to burst in and stir up some trouble. This isn't saying that NPCs are totally stationary as guards do walk around patrol routes and don't necessarily take the same path twice. This was brought to my attention when retrying a failed mission and encountering a guard where there wasn't one before. The obvious



Now he'll never know the final score!



Time to take down the British Museum - special-ops style!



That's the end of him

advantage to mostly stationary enemies though is that owners of lower end systems (from 800MHz up) will be able to enjoy a graphically rich game made with a very powerful engine.

Let's play dress up

A nice aspect of Raven Shield is your team's outfits change with the environment. If your mission was to take place in the snowy Alps of Switzerland your team would be suitably outfitted in white camo gear and in this cold environment produce steam from the heat of their breath. Alternatively, taking it to a den of drug barons in Brazil utilises a new texture set that represents jungle camo gear.

The models are of above average poly count and are good overall, but look clunky at certain angles. Their attention to detail however is good in that the weapons of your team mates are always visible. Although it's possible to bring up an inventory menu to see what everyone has left, it's also possible to make a cursory glance at their belt as the weapons, grenades or utilities assigned to them will be displayed. This is even taken to the point that a team member commanded to throw a grenade will actually take it off his belt first, then lob it at the enemy.

RAG DOLLING

Besides a nice new buzz word, rag dolling represents a new process that is gradually creeping into our games. Rag dolling puts the Vertex shader to good use by creating a skeletal framework for each NPC that allows for the realistic bending of joints. What this amounts to is if you kill someone against a wall, they will slump down it. Shoot someone on a balcony and they will come toppling down, like a rag doll.

Combat fatigue

As discussed in our E3 report that seems so long ago now, one of the great assets of Raven Shield are the comprehensive graphical effects it uses to represent smoke, gas or a flash bang grenade. Smoke is amazingly well rendered and appropriately invasive. Throw a smoke grenade into the thick of things and it will start to release numerous clouds (volumetric sprites actually) of smoke to fill the room. At first it's just a light haze but as the effect builds up you literally find yourself confused and blinded by it. Furthering the clever effect is that the edges of the cloud are less dense and it spreads out in a 3D fashion so it's possible to walk in and out of a smoky area.

Another effect that is extremely impressive is catching a glimpse of your detonated flash bang grenade. Although you're supposed to turn your back when flashing a room to avoid disorientation, in Raven Shield you have to flash yourself at least once just for the graphical effects. Simple yet revolutionary, when viewing a flash grenade, the last thing your character saw before detonation is thrown up on your screen as a translucent texture while the world around you blends and warps into itself. On top of this a very high pitch noise is played that anyone who's ever been bothered by tinnitus (ringing of ears) will instantly recognise, which is exactly what the sound is meant to simulate from the concussion force of the grenade - and it does, "earily" so (sorry).

The final noteworthy effect (and another grenade you should inflict upon yourself) is tear gas which sprays out a cloud of debilitating chemicals that cause coughing and your victims' eyes to gush tears. When encountering this gas (without a gas mask) the team will cough (which is all fully animated) and a very heavy motion blurring effect which gradually wears off is used to simulate eyes so watery you can barely see.

So what kind of a game am I?

Sound effects in Raven Shield are extremely good with clear well sampled sounds for weapon discharge and reload. The game makes full use of Direct Sound 3D as well as EAX/Advanced HD. Surround effects are implemented extremely well and it's very easy to discern the direction of your team mates and enemies by listening carefully. Making the most out of a 3D environment even the smallest objects, such as an ejected shell casing, is given positional audio and after the last shot is fired in battle it's awesome to hear the expended shell casings still pinging to the ground.

These latter effects however aren't as spectacular as the Virtualisation functions that offer full HRTF (head related

transfer function) support meaning that sound waves are fully calculated and occluded within the environment. What this amounts to is that if you walk into an area with walls, the sound waves are simulated, right down to their reflection meaning that there is a dramatic difference in the representation of sound in an outdoor environment than indoor. Likewise sounds from inside a corridor or crawl-way sound different than those from a more open room.

Where sound becomes a little confusing is in regard to the fact that the game features music at the seemingly most inappropriate time. Given the serious, tense nature of the game where you never know whether the opening of the next door will be your last, when it finally happens and a fire-fight erupts around you the game starts playing loud cinematic orchestral music. Although the music can be turned off the first time you encounter it you're left scratching your head saying hold on, is this a serious simulation or an action game?

Overall, the latter statement sums up what Raven Shield is really all about. It is both an action game and a very serious tactical simulation through use of the planning interface. The delineation however isn't as clear as that because the action game could still be a little sedentary for those that prefer the more classic, less cerebral shooters. For those that loved Rainbow Six/ Rogue Spear or those who are patient enough to achieve gaming gratification, Raven Shield will appeal.

Jere Lawrence

RATING

FOR

Dramatic gameplay
Mission planner
Graphics and sound

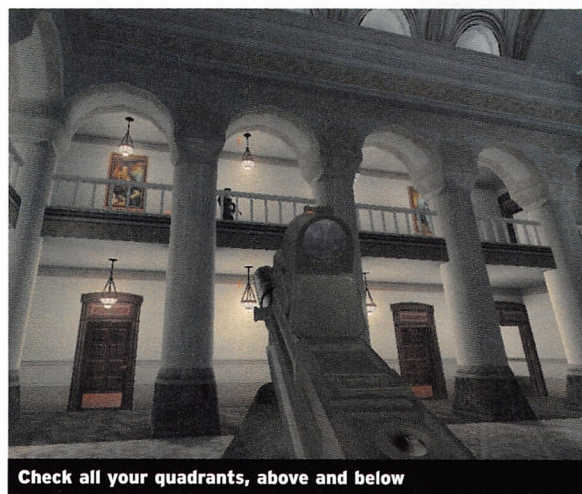
AGAINST

No mid-mission save
Large levels
Game can be hard

OVERALL

A highly detailed, well polished and entertaining game for those with time on their hands

84



Check all your quadrants, above and below



Assembling the team for the first strike

Sim City 4

Developer: Maxis ■ Publisher: EA ■ Distributor: EA ■ Price: \$89.95 ■ Rating: G ■ Available: Now



Another instalment of digital insomnia from Maxis



Power plants are vital, but keep property prices low



The interface allows for incredible micro-detail



Like blockbuster movies, some games struggle to remain intuitive and original in their sequels, but thanks be to the God's of gaming that just as there's a Godfather 2 and 3 for every Grease 2, there's also a Sim City 4, for every Gangsters 2.

Sim City stretches way back past a mere one or two previous versions. I can remember laying down the odd residential zone on my C64, when coloured squares - that came in a whopping three different sizes (and a similar amount of colours) - were used to represent the whole city. Boy, have things have changed - well, at least in the graphics department - because the game mechanics remain just as intuitive and addictive as ever.

The X Factor

So what is it about Sim City that people just can't seem to get enough of? Is it the challenge of successfully formulating intricate city plans and economic strategies? The satisfaction in watching as your settlement grows from a small unexceptional farming village into a hustling, bustling megatropolis? Or maybe it's the player's godlike ability to level the joint in a matter of seconds utilising an arsenal of Mother Nature's most fearsome weapons? Most probably, it's a mix of all three, with a whole heap more thrown in to boot.

Those familiar with previous Sim City games will be able to leap straight into this one without any trouble in the slightest. Those that are not probably don't own computers, so there's no reason for them to be reading this at all. However, if there is somebody out there that both is an avid gamer and has not played Sim City before, they will certainly find the controls to be user friendly, obvious and appealing.

The game menus are divided into two different categories, "God Mode"

and "Mayor Mode". Once an item is selected from either of the menus, it takes a simple click on the map in order to place it.

City Building 101

The Mayor's tools are the ones that will be used most often; they allow you to build the things crucial for the success of every fledgling city, such as police and fire stations, power plants, roads, hospitals and the Great Pyramid of Egypt (seriously). The Mayor's tools also allow you to zone certain areas, which sets that space aside for the construction of a specific type of building, namely "industrial", "commercial" or "residential" buildings. The exact type of building that is constructed in these zones is dependent on just how well you've managed your city planning. For example, setting out a residential zone in a toxic waste part of town, next to the city dump and across the road from the local lead smelter will not see the erection of a multimillion dollar mansion, more likely a few dilapidated shacks and tin sheds. As mayor, you must provide housing for the rich and poor alike, but as a general rule of thumb, shantytowns are not a productive part of an expanding city.

The God menu allows you to wreak havoc on the thousands of blissfully ignorant Sims inhabiting your city. Impending doom is at your fingertips in the form of lightning bolts, volcanoes, earthquakes, meteor showers and other such entertaining catastrophes. As wickedly amusing as this may be, the name of the game is construction, not destruction, and the disaster menu represents only one small section of the options available in God Mode. God mode can also be used to change day into night (or visa versa), to obliterate a city, or to modify the terrain prior to building. Obliterating the city is viewed as more of



LAUGHS APLENTY

SimCity 4 is loaded with its share of (sometimes poor) humour - which at times borders on the slightly bizarre, and much of which only regular Sims players will get. From the strangely named "Fluffy the Wonder Cat", to Jonathan Sparks and Monique Diamond (the power and money advisors), subtle pieces of Sim-humour are abundant. Instead of claiming the normal loading procedures, such as "Loading AI table", "Generating random items" or "Importing textures", SimCity 4 informs you of such things loading events as "Stabilizing Rhinoceros Farm", "Fixing election outcome matrix" and "Adding hidden agendas".

a magical wipe of the landscape than a "disaster". It allows you to restart the city from scratch with your original amount of simoleons (sim dollars), no debt and a new Mayor. The process, however, is irreversible and even overwrites your saved game files!

Incredible depth

New with Sim City 4 is the ability to monitor a handful of specially selected Sims in your city. You can create a new

SYSTEM

NEED

P3-450
64MB RAM
16MB Videocard
500MB HDD

WANT

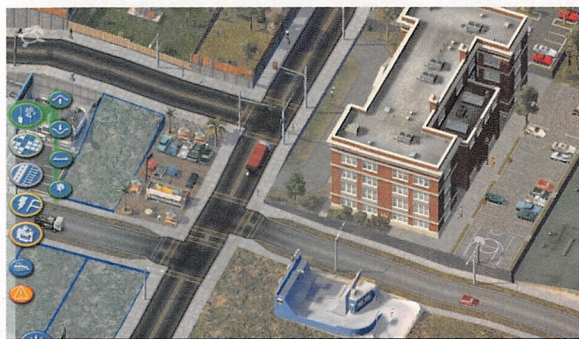
P4-1GHZ+
256MB RAM
GeForce4
500MB HDD

MULTIPLAYER

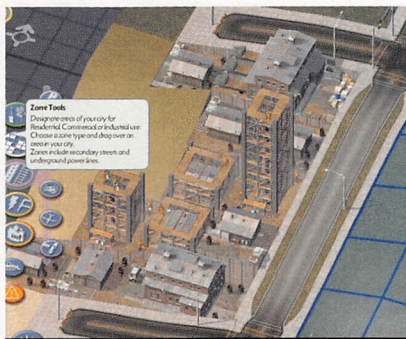
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ONLINE

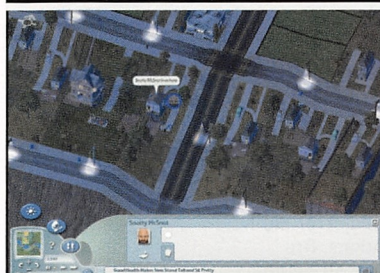
www.rtpi.org.uk
Want to be a town planner? A real life town planner? Then this is for you! The Royal Town Planning Institute! It's British! More fun than sewage treatment!



Even a skate-park can improve your city. Amazing.



Clever zoning maximises revenue



At night, the city slumbers



Your take on the Spit Bridge redevelopment?

RECONCILE NOW?

When things are built on steep slopes, the terrain is often automatically altered a little, shaping it so as to better accommodate the new structures. This is a double-edged sword; on one hand it allows you to build things where you previously were unable, but on the other hand it modifies the terrain, often creating an uneven border between two neighbouring cities. The only way to fix this is to "Reconcile borders" option (which allows normal trade etc. to occur), but this also modifies the terrain again (so the two borders fit together) often causing any building built on this terrain to be destroyed in the process! This seems kind of inelegant, and it's a shame Maxis couldn't have thought of a less-damaging system.

Sim from scratch, select a pre-made Sim, or even import Sims from other games you may have installed (namely games from "The Sims" series of expansions). Once a Sim is selected, you choose an initial house for them to move into and then sit back, watch, and hopefully learn a thing or two about your city. After a Sim has taken up residence in the municipality, you have no control over them at all, but they will keep in contact with you, complaining about or complimenting various aspects of their new living place. You can monitor their development as they progress through the daily rigmarole of life inside your computer. Any number of things can happen throughout their lifetime such as getting new jobs, university degrees, moving house and even dying (which evidently signals the end of their lifetime). While they are still kicking, you can even watch as they walk the streets and drive to work.

As Sims get more educated, they will get better jobs (or promotions), drive more expensive cars and may even move into a larger house in a well-to-do part of town. Conversely, if your city stinks they may end up getting fired or moving out of their nice house into one of those dingy huts next to the industrial estate. Living next to

all that pollution will, of course, have an adverse effect on their health and Sims that live in these areas usually have a much shorter life expectancy than those that live in a more comfortable part of town. At this point you have may have begun to grasp a rough idea of the level of detail evident in Sim City 4, and guess what? That's not even the half of it.

The strength of Sim City 4 - and what really sets it aside from previous versions (not that they were lacking) - is the incredible depth and detail that is evident, often to jaw-dropping extremes. An inherent problem with highly detailed games is that often they also tend to be complex to an unenjoyable degree, but have no fear, as this is not the case with Sim City 4. Indeed, you could choose to play out the whole game with the city zoomed out to a point where the detail is indistinguishable, without monitoring any Sims, without viewing a single graph and without listening to a word your advisors tell you. In fact, Fluffy the wonder cat (Maxis' peculiarly named helper) will inform new players that the advisors can be turned off completely with a simple key press.

Although ignoring the details is optional, it's not one that I would recommend anybody take, as depth of detail is precisely what breathes life into the city and makes Sim City 4 the absorbing and interesting game that it is.

This subtle complexity is first noticeable in the graphics. For example, not only can Sims be clearly seen walking the streets, they can also be seen constructing new buildings with welding tools, walking the dog, extinguishing fires and - if they're not happy - rioting, smashing shops, leaping up and down on car bonnets, and even banding together and overturning vehicles in the middle of the road!

At this point, any cluey Mayor would dispatch his police force, which arrive at the scene in an armoured car, sirens blaring and lights flashing, dressed in riot gear, complete with riot shields and batons to disperse the mob and bring order back from the chaos. No, this is not all some bizarre figment of my overworked imagination, this is all real visual detail that can actually be observed in your very own city, and - believe it or not - that's only the tip of the proverbial iceberg. This depth is truly astonishing, and even more surprising is that it's not at all repetitive or predictably scripted either. Some events will only be noticed after many days of play, if at all.

For example, I was amused and amazed to witness my fire-fighters rushing to a blazing power plant only to jump out of the truck, bump into



It all looks so peaceful at this altitude



Farmland. Takes up space.

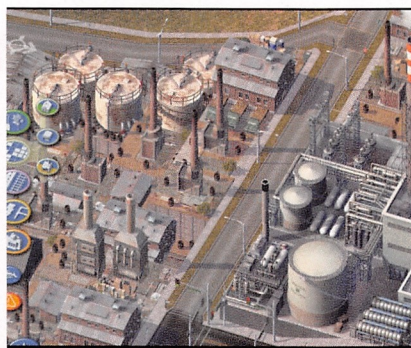


KILLER SOUNDTRACK

SimCity must be noted for its awesome audio track. Of course, music is one of those things that is largely dependent on personal opinion. Beauty is in the eye of the beholder, as the saying goes, just as sweet sounds must be in the ear of the beholder... er... or something. There are no contemporary rock bands or artsy, meaningful lyrics, just grooving, unobtrusive and appropriate music. This is comprised partly of Fifth Element/Gladiator styled vocals sung in haunting but completely incomprehensible gibberish laid over a grooving, bassy techno sound track, and partly comprised of the familiar SimCity/Sims tunes.

themselves and then proceed to wrestle with the anaconda-like hose as it squirmed around under the pressure of the water jet, throwing fire-fighters everywhere and wetting everything except the actual fire! Bemused by their incompetence, a quick check of the local fire station confirmed my suspicion that they were hopelessly under-funded which was no doubt the cause of this amusing, but ultimately costly little escapade.

As one would expect, all good things come at a price, and Sim City 4 will demand a large chunk of processing



Heavy industrial zoning at work



Residential areas are packed with detail

power and a lot from your system's memory if you want to play a large city with all the detail turned on. Those without access to a computer powerful enough to contravene several military regulations can still play Sim City 4, but may have to turn the detail down or focus on smaller (but not necessarily inferior) cities.

Differing terrains and regions

Thankfully, Sim City 4 allows you to play on several different sized map regions, the smallest of which still allows a fun and astoundingly deep experience without the drain on your system that would be incurred from recreating Los Angeles in your computer's RAM. The largest of map regions are truly immense and allow the establishment of full-blown mega cities, but it is not a necessity of the game that you choose to build in these regions, so relatively humble systems still provide a staple platform for some engaging Sim City gaming.

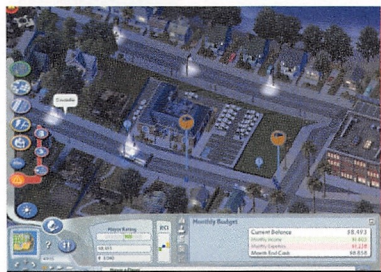
It's true that anyone familiar with any past versions of Sim City will be able to pick-up this one without so much as a glimpse at the instruction manual, but they also may be setting themselves up for a rude shock. The technicalities involved in developing a successful city

are a little more constrictive than in previous versions, as a careful and predictable path must be followed in order to prevent a growing city from going bankrupt. For example, all of my initial cities descended into a frustratingly unstoppable spiral of impoverishment before they could really take off.

Only through trial and error did I discover that police stations, fire stations and hospitals are all highly funded establishments that are an unnecessary strain on a small, growing city. Schools, on the other hand, are essential, as the population needs to be educated before they can get better jobs which will establish a solid commercial sector and make way for high tech, environmentally friendly industries. This is in stark contrast with previous versions of Sim City, in which police and fire stations were crucial additions for small towns, and schools and libraries were luxuries that could be included once the city had established solid roots.



Fire - ancient foe of the fat Mayor



Keep an eye on the funds



You need well-funded emergency services to deal with this kind of thing



A giant robot. Stomping my house. Oh well



Now it's running perfectly, destroy it!

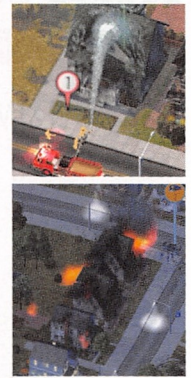




Military bases can rake in cash, but affect property values



Thanks boys! The mahogany flanger is saved!



For the better or worse?

These subtle changes in the games mechanics do make for a much more challenging experience, although this comes at a certain cost to imaginative city planning and beautification. Large slabs of boring and space hogging residential and industrial zones are an absolute necessity when building successful cities, and even then, a tight budget and ever demanding population of discontent Sims limit your freedom of choice slightly more than in past versions. Some may view these changes for the better, as Sim City 2000 and Sim City 3000 could have been viewed as slightly too easy, but others will find it a frustrating hindrance on their creativity.

Either way, once a city really digs in its roots, the budget charts will begin to show ever increasing profits and then innovative and imaginative additions can be made to your city freely, but only after the town has got past its uncertain and delicate infancy.

Sim City 4 is not going to disappoint anybody. Great strides forward have been taken since previous versions (however hard that maybe to believe), resulting in a much deeper, more detailed and far more challenging title. Experienced Maxis Sim-mayors will find the same addictive, fun and visually appealing experience that they've come to expect from the genre, while Sim City newbies will be left pining over what they've missed in the past years. Malevolent wannabe super-villains will also enjoy Sim City 4, they just may find it annoying that they actually have to build a city before they can rain their chaos upon it.

Victor Webster



South Central Los Angeles - be afraid, be very afraid



Some rich folks around here...

TERRAIN EDITING

Sim City 4 has taken impressive leaps forward with geographical modelling. Mountains, craters, cliffs, beaches and canyons (to name a few) now combine to make an interesting and realistic landscape for building new cities. All the landscapes can be freely edited before you begin construction, but once the first bricks are laid, your terrain editing options become quite limited and will make a heavy dent in the cities funds. Be careful not to get too creative with your terrain editing, as Sims prefer to live on flat, spacious ground; building a successful city on the face of a mountain is an extremely challenging venture!

RATING

FOR

Incredible Quality
Staggering detail
A+ Audio & Visuals

AGAINST

Reconciling borders
Will harm social life
Can be frustrating

OVERALL

If you value your sleep, eating patterns or social life, DO NOT buy this game.

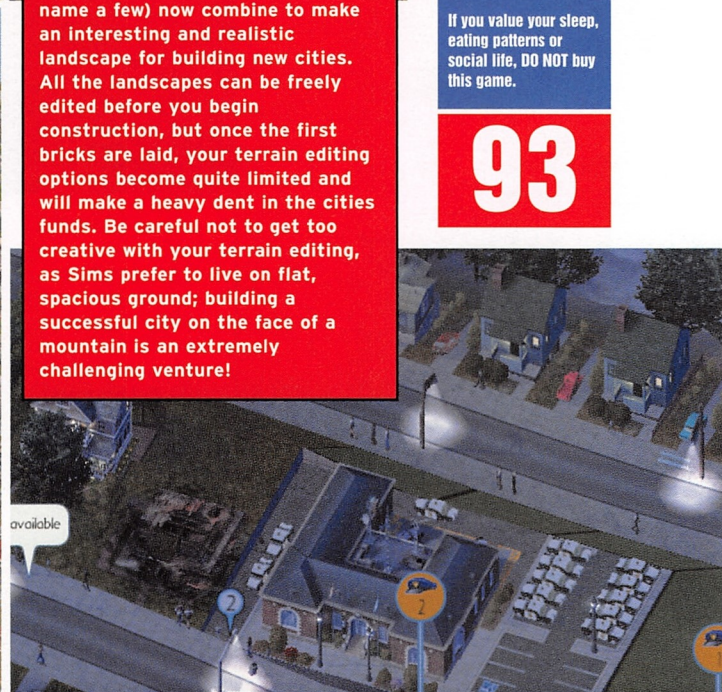
93



Underground view. Mmmn, pipes!



Life on the bluff - windy



Let's egg all the police cars!

Morrowind: Tribunal

Developer: Bethesda ■ Publisher: Bethesda ■ Distributor: Electronics Boutique ■ Price: \$49.95 ■ Rating: MA15+ ■ Available: Now

Steal my shoes will you? Have at thee +12!

SYSTEM

NEED

P2-500
128MB RAM
32MB Videocard
Morrowind

WANT

P4-1.4Gz+
256MB RAM
GeForce4
1GB HDD

MULTIPLAYER

Yes

ONLINE

www.elderscrolls.com

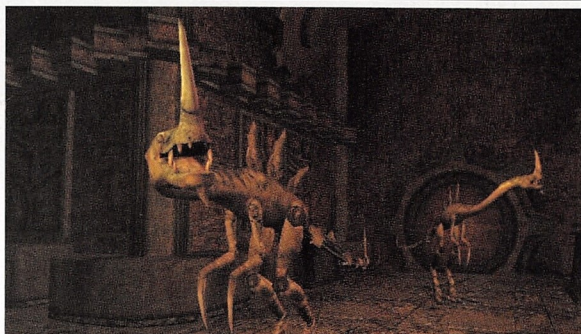
Yeah yeah, so it's the official site and pretty much what you'd expect. But it has forums, so it can't be all that bad. Forums rock.



Some of the friendly folks you can expect to meet



Some new enemies are particularly odd



And the moral is: don't flush your budgie down the loo

This might be just the ticket if you found the original game too open ended and unstructured

romp. However those who enjoyed it, but somehow ran out of steam may find this expansion pack might actually help you renew the love affair again as Tribunal is an easier game to follow with a better sense of direction.

The game adopts a very different narrative approach to its parent. Morrowind had many sub quests with moral decisions that were presented to the player. Often allegiance had to be declared with your support of one factional group

meaning that you had just become not too popular with the members of another group. This sort of thing made you feel as if you were just one ingredient in the bubbling cauldron of political intrigue and machinations that so typified the world of Morrowind.

Frustrating elves!

It might have frustrated some, as certain decisions locked off other options for your character changing the course of the plot forever, but it was pretty involving stuff. In Tribunal the story is more of a conventional sort.

You have two key quests to pursue which centre around a number of assassination attempts, leading you to the capital of the region, Mournhold.

These quests are challenging and you will find you will need a well-equipped

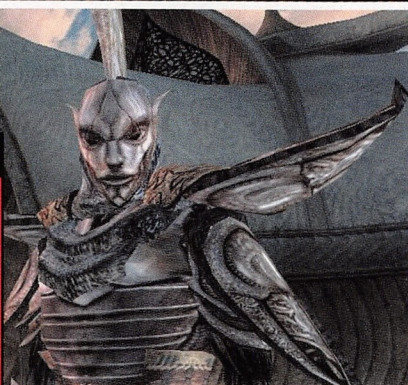
and experienced character from the original game if you are going to survive let alone complete them. However there isn't so much of a sense of narrative diversity as that which accompanied the original game and this is a pity.

In pursuing your quests you will work as a spy for King Hestleth, and then eventually you will serve as a hit man hunting down a nefarious group called the Dark Brotherhood. Naturally with such a name these guys are more than a bunch of beer buddies who get together on weekends, so expect some serious opposition.

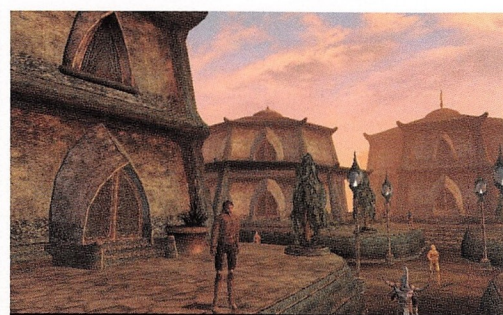
Indeed some of the new weapon types you come up against are pretty

MORROWQUEST

If ever there was a title which would adapt well to the increasingly popular realm of the MMRPG then Morrowind would fit the bill. Everquest feels quite similar to Morrowind in some ways, (obviously the FPS viewpoint is a key example) and it would be heartening to see Bethesda test the waters in this department as the rich Morrowind world would be a good candidate for such a treatment. The fact that the game ships with a reasonable to use (although at times complex) construction set world builder tool is also a good thing as it makes it a logical step forward that the game takes the path tread by games as they head more for the realm of online play. That said such an experiment could prove costly and it is as a single player experience that the game has worked to date, and we'd like to see this trend continue too. Call us cheeky, but having out cake and eating it too is just too irresistible.



Morrowind was quite a surprise when it appeared here earlier this year. Not only was the game a brilliant 3D RPG, but the world was so vast, unstructured and full of different threads for you to pick up and pursue along your travels. Some may have found the multifarious nature of the game off-putting though as it was really quite an encompassing



Sprawling urban areas are full of quests



This club has damn ugly bouncers

challenging as the Brotherhood specialise in tainted blades that also poison and paralyse poor sods like yourself. These guys are your chief enemy in the game, and without spoiling things and telling you too much, you will want to probably take a few side quests and encounter some lesser enemies just so you can build up your skills to the level where you can successfully take the Brotherhood on. There will be some aid from NPCs too, but for the most part you are on your own and depending on your class this is quite a challenge. Certainly sticking with the harder classes you will find the large slices of combat which are on the menu are easier to digest. Weaker classes might see you reloading a bit more than you'd prefer, but such is the life of a smart arse thaumaturgist.

Intrigue and daggers!

You will also find the NPCs in Tribunal don't seem to be as aware of the world around them as their predecessors in the original game. Where they would be referring to their mates, their enemies and all sorts of shenanigans happening all over the place this time around they are more introverted. This is a double edged sword of sorts as it gives the game a more focused feel, but also makes the world seem as if it is less connected by a geopolitical web of interrelationships and is as a result less believable.

There have been some welcome changes to the interface though. You can better add notes to your map, helping you to recall where you are heading, where you have been and what is important about either. The game uses a new icon system which is a big improvement.

Also the journal, which was a frustrating bag of pus to use when compared to the excellent tool in Neverwinter Nights, needed extensive tweaking. This has been done and the journal is more flexible as you can now toggle between completed quests and those you are still having a go at. Tribunal will even update your journal if you are playing the original game, but it takes a while to do it. The journal also has a new section which collates information ensuring that data related to a particular quest is located in the same area - big huzzah!



The new interface in action

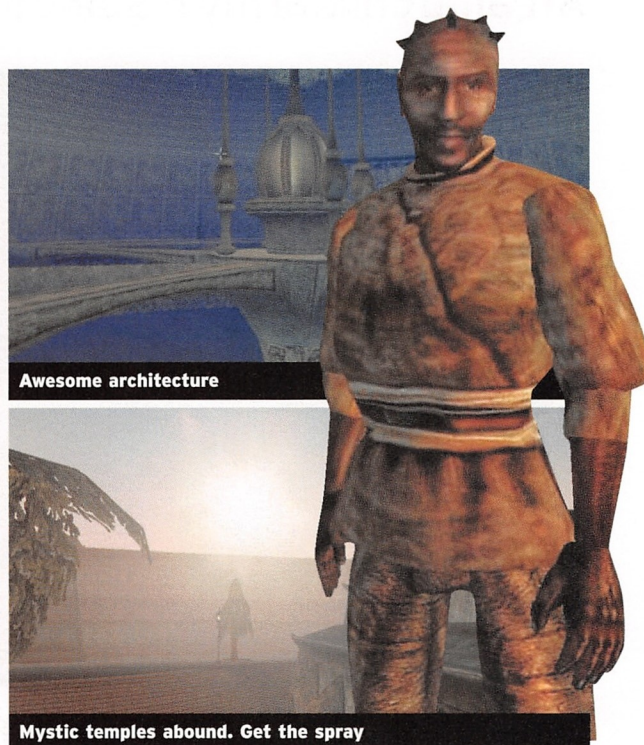
MORE CLASS THAN ARSE

One of the best aspects of the Morrowind series is the fact that there are so many original classes and races. Sure you have your basic beefcake fighter types, rogues, priests and magicians which popular other similar RPGs, but Morrowind isn't so slavish in its devotion to the Tolkienesque adventure (not that there is anything wrong with that approach). Indeed much imagination has been poured into this gameworld and this is why we'd like to see more releases featuring it. If you are sick of pesky halflings, pompous Paladins and all of the usual folk from most RPGs Morrowind and Tribunal offer an original alternative. With this reason in mind, coupled with the fact that the games have been pretty good, we hope the series continues to live on.

Bugs of doom!

The code is still far from perfect though. Clipping issues pop up from time to time when the camera viewpoint and the 3D engine decide they aren't quite on the same page. Even more annoyingly the NPCs you hang out with have an annoying habit of not navigating with the most intelligence, with the result being that they get stuck on corners or wander into danger when they should know better. They should just die for their stupidity, but sadly you get punished along with them as they are sometimes necessary for you to continue with your quest.

So there are reasons why those who loved Morrowind will feel that Tribunal is a good buy. Certainly the game delivers more of what you have already



Awesome architecture

Mystic temples abound. Get the spray

enjoyed to date, and there is plenty of hard combat and a smattering of new classes. However even more surprisingly this expansion pack might be just the ticket if you found the original game too open ended and unstructured as Tribunal is easier to play in this regard.

Steve Polak



As for this: we don't even know what this is



Wonder what Wendy's wistful wish is?



Trees. The silent killers

RATING

FOR

Easier to follow
Interface
More stuff!

AGAINST

Some bugs remain
A paid-for patch?
AI gripes

OVERALL

Excellent addition.
Fixes, improvements,
new quests, nicely
done all round!

84

Soldiers of Anarchy

Developer: Silver Style ■ Publisher: Simon & Schuster ■ Distributor: Red Ant ■ Price: \$69.95 ■ Rating: M15+ ■ Available: Now

An anarchic army? Someone needs a politics lesson

SYSTEM

NEED

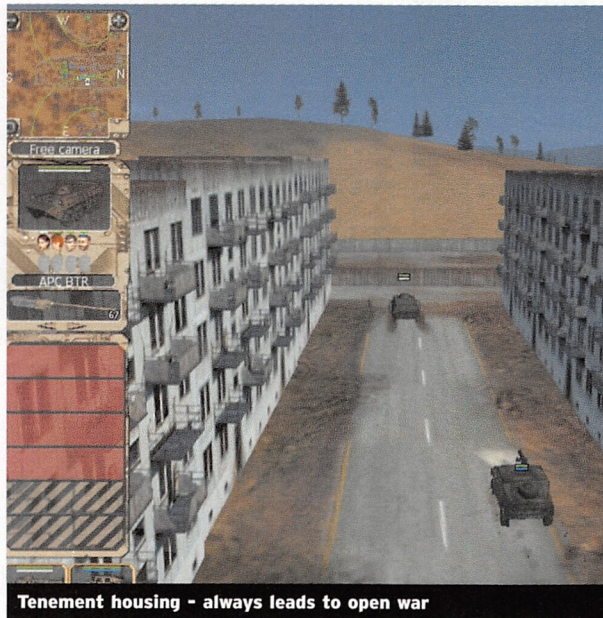
P2-600
128MB RAM
16MB Videocard
600MB HDD

WANT

Athlon 1600+
256MB RAM
GeForce4
600MB HDD

MULTIPLAYER

Yes



Tenement housing - always leads to open war

Some fresh ideas and stunning graphics but you'll need a pretty fine machine to run it

I love a good team-based shooter. Ghost Recon and its add-ons have given me many pleasant hours of strategic planning and action. As a result I was looking forward to Soldiers of Anarchy as something that might take the genre further. In some ways it does just that, but it introduces some annoyances on the way.

Like Ghost Recon, SOA is 3D, with a well-planned campaign that gives you plenty to do in the huge maps of your world. Unfortunately, that world was irreparably damaged by biological weapons in 2004, when you and your team decided to hide underground. Ten years later you've decided to explore the world and see how things have turned out. What you find is a world of anarchy, ruled by gangs who are happy to attack anything that moves. In addition, there are some seriously grumpy bears and wolves who need to be kept in hand. You and your team will be asked to help the nice people you meet, kill the baddies and collect whatever guns, vehicles, aircraft and ammunition that you find. Tip: killing the baddies helps a lot.

What else is there?

SOA has a comprehensive manual along with a Securoam 4.8 protected CD-ROM. Backing these up to a playable disc image is quite tricky so you might want to check <http://www.cdfreaks.com/> for tips. You may consider doing this because loading each level is very slow, and anything that might speed things up will be welcome. In fact, even the so-called quick save and quick load were almost unbearably slow and in the end, annoying.

The manual goes into a lot of detail, explaining the various commands,

BUGGY BUGGIES?

Two things really bugged me while playing SOA; the camera, and pathfinding. The camera can either track a player or allow you to roam across the map. In theory this sounds fine, but it means that you play the game with your right hand on the mouse and your left on the keypad. The zoom doesn't go far enough, the camera moves abruptly for no obvious reason, and seems to rotate in the opposite direction to other games. The rotation keys are also different depending on which mode you're in. Pathfinding drove me mad; if you put a vehicle on a straight road and tell it to go to the other end it will weave along like a drunken cow with a broken hip. Actually it will only do that after it gets stuck behind a fence post briefly or goes in the wrong direction for a while, once again for no obvious reason. You can also tell a soldier to hop into a vehicle next to her, and she'll respond by running around any other vehicle nearby before returning to her starting point and hopping in. Long distance pathfinding is just not an option; the vehicle just won't obey. You can set waypoints but vehicles will wander crazily in between them, sometimes coming under fire as a result.



Cleaning up Redfern - day one



Day two - everyone has a day off



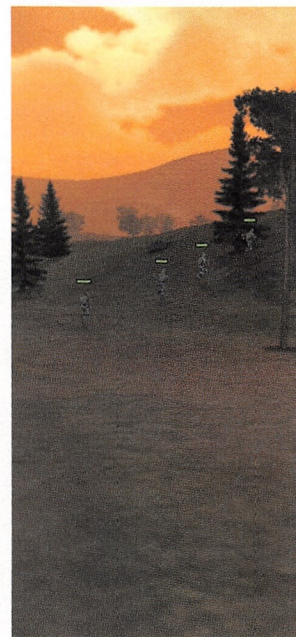
Day three - we break out the APCs and the sarin

keyboard shortcuts, how to use the editor to create maps, and the characteristics of the weapons, ammunition, vehicles and aircraft that you'll use throughout the game. It also takes you through setting up multi-player games over a LAN, via direct IP addresses or through GameSpy.

What's new?

SOA brings some interesting ideas to RTS. Like most 3D shooters you have a mini map which helps you navigate, as well as showing where your next goal can be found. At the start of your campaign your force of four men are armed with pistols and limited ammunition. You receive instructions to find an old base and then blow a dam which has helped to hide your bunker. At the old base you find weapons and ammunition which sets you off on your journey. During your campaign you'll listen to some pretty cool music, and some quite fine sound effects.

Throughout the game you have the opportunity to train various team



ANARCHIC TACTICS

Tactics are very important for many reasons. For example, in one mission your goal is to penetrate the middle of a city and free some slaves. You're warned that battling gangs on the outskirts may be dangerous, so you're wary of getting involved. However, taking out a small bunker of soldiers armed with anti-tank rockets means that you'll be able to scavenge the RPK and rockets. They will be almost essential later on in the mission. Vehicles are key in SOA. The maps are so huge that running around can be a bit slow, and vehicle weapons are going to save your butt many times over. Even just a Hummer with a mounted M60 will aid you immensely. You're likely to acquire a Hummer and other vehicles by "persuading" enemies that they no longer need them. Once you've got it under your control the trick is to keep the vehicle supplied with ammunition. Understanding how to manage the various weapons, ammunition and resources will keep you alive longer.

Tip: killing the baddies helps a lot

members in various specialties. Your explosives expert alone can blow things up with TNT, although any of your soldiers and most vehicles can carry explosives around. He can also pick up and reuse any mines that you find; any other soldier will end up blowing himself up (along with anyone or anything else nearby).

As you progress you'll find lots of things. First-aid kits are very useful, and even more so when used by a healing expert. If a soldier has a kit he can heal either himself or others, which accords a little more with reality.

Between missions you return to your bunker. In your bunker you can do a lot of work to prepare for the next mission. You can adjust your team, redistribute resources, leave unwanted resources behind for the next mission, repair vehicles, manufacture drugs and trade with the local scavengers.

Managing resources

Thankfully there are no harvesters in SOA. However, weapons, ammo, first-aid kits and other things (resources) need to be managed, and this is a strong element and well thought-out. Both soldiers and vehicles of all kinds can carry resources - up to a point. While your explosives man can pick up enemy mines, he can only carry so many, depending on what weapons and ammunition he's carrying. But just as in real life, he can go to one of your vehicles and dump excess articles in the vehicle, but again, only up to a point; different vehicles have different carrying

capacities. If your troops find more ammunition or weapons than they can personally carry they can dump them in a vehicle and then go and get them when they need them. A soldier can give anything to another soldier too, so a small party might go out armed with one rocket launcher, but with all members carrying rockets. Naturally, a vehicle can't collect ammunition, but a soldier can find a crate of 7.62 mm and then dump it into a Hummer, which can then use it.

Vehicles need people to drive them and fire their weapons. A Hummer with one occupant can drive around, but it needs a second occupant before it can fire its weapon. It takes time for soldiers to enter or exit a vehicle, and the graphics are quite cool because you can watch them open and close doors or climb up the tailgate. This can be a touch annoying when you're in a major hurry, but that's life.

Other things take time too; it takes a few seconds for a driver to start the vehicle and move off. If the vehicle happens to be a helicopter with its engine turned off then it might be 20 seconds or so by the time the engine starts and the rotor comes up to speed. If the baddies are coming then you may as well not even bother.

SOA is a good game. It's got some fresh ideas and stunning graphics, but you'll need a pretty fine machine to run it on full detail. I would have enjoyed playing it immensely but for the camera and pathfinding issues. If these are fixed in a patch then SOA will be a must buy for the team-based strategy player.

Andrew Calvin



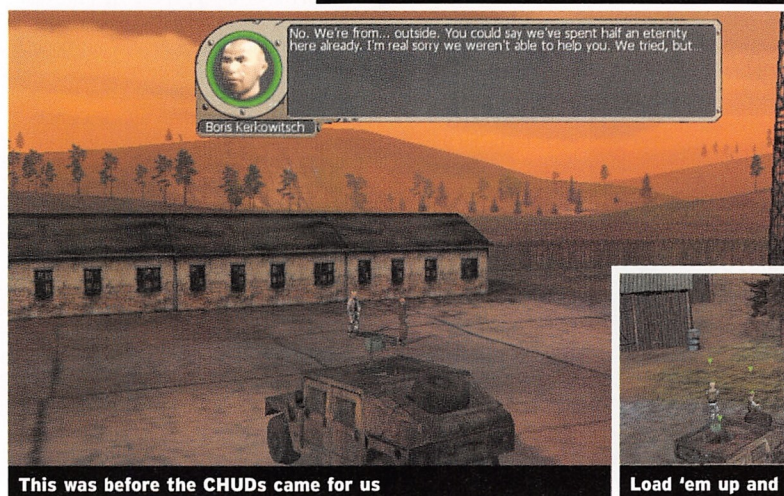
Controlling vehicles is key to dominating each mission



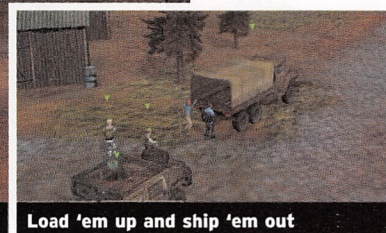
Watch out - this is a dangerous new world



Are you afraid yet?



This was before the CHUDs came for us



Load 'em up and ship 'em out

RATING

FOR

Resources
Vehicles
Storyline

AGAINST

Pathfinding
Camera
System requirements

OVERALL

Refreshing new take on RTS is not spoilt by a few familiar flaws

81

O.R.B.

Developer: Strategy First ■ Publisher: Auran ■ Distributor: Microsoft ■ Price: \$89.95 ■ Rating: G ■ Available: Now

That would be "Off World Resource Base" to you and me

SYSTEM

NEED

P3-450
64MB RAM
GeForce2
1GB HDD

WANT

P4-1GHz+
256MB RAM
GeForce4
1GB HDD

MULTIPLAYER

Yes



RATING

FOR

Fantastic Graphics
Modding editor
Massive battles

AGAINST

Missions can be
VERY hard
Meagre Resources
The interface is
lacking

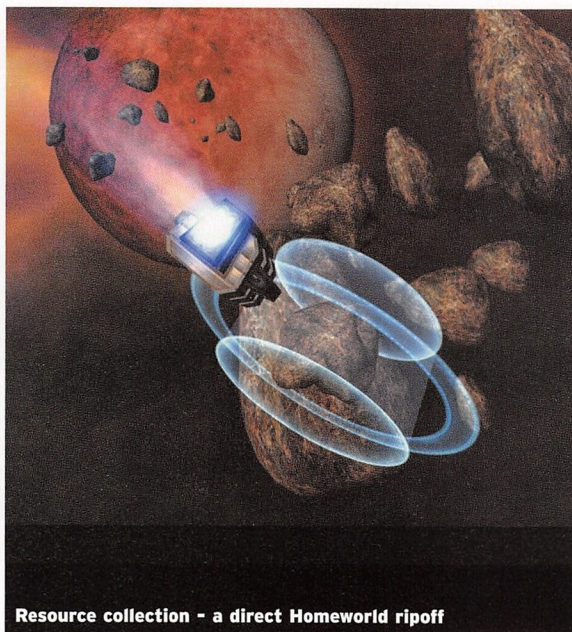
OVERALL

Fans of Homeworld
will love this while
others can safely
ignore it.

83



Fat explosions - what space RTS is made of!



Resource collection - a direct Homeworld ripoff

Whilst in the mid to late nineties it seemed that everyone was releasing an RTS game of some type but these days FPSs are the cloned product of choice due to their more simplistic nature. Yet one title at the end of the RTS "clone wars" deserved far greater attention. "Homeworld" made us fall in love with the brilliant 3D environment and astounding visuals of capital ships fighting it out and there hasn't been a fitting contender as Starmageddon: Project Earth just didn't quite make the grade. O.R.B. on the other hand is an unashamed clone that pays homage to the 3D classic without taking 3D space based RTS to new levels.

Real world regurgitation

The story of O.R.B is about two religious factions at war over their interpretations of a collection of 4,000 holy books, the Torumin (sound familiar? *sigh*). With their planet ravaged, the two factions are space bound in a quest for more resources and you start as a young officer who earns a commission to command a small fleet of ships that eventually become a very large fleet of ships. As the "strange, mysterious, unidentified" third race hasn't revealed itself yet, combat at the beginning is with your estranged brethren but predictably, you will eventually establish a truce and cooperate to destroy this more dangerous "third enemy"

who most likely ends up being the original authors of the "Holy books".

Take a step backwards

A thoroughly important consideration when making a 3D RTS is that the interface has to be fluid to allow for fast combat

decisions, which unfortunately isn't the case with O.R.B. Although a number of commands are the same as Homeworld, such as using the space bar to change from a 3D to 2D map the problem exists with a lack of functions. For example, there is no "all units of same type key" which means making groups involves literally selecting the entire map then shift-clicking to remove units not required.

The 3D interface is also annoying as a group of more than ten fighters confuses the camera which in order to keep them in view locks your ability to zoom in, negating any useful view of the battle. Another lacking function is the ability to more ably control the attack patterns of fighters. Although a formation can be made, unless they are told to collectively attack an individual enemy they'll break into smaller groups and engage multiple enemies. This is incredibly frustrating as you quickly learn that telling your squads to sequentially attack a single unit will result in much fewer losses than letting the CPU control the fight. This combat micromanagement quickly becomes tiring and is compounded by the fact that resources are scarce and every ship counts.

Spend wisely

Scarce resources however, do make for a far more strategic combat experience. Firstly, resources are your only currency and allow for the production of all units as well as research. Research has the disadvantage of being very expensive, but the advantage of being permanent with researched ships remaining in missions.



Here's one Homeworld prepared earlier



Tasty nebula effects - now de-rigueur



A foaming kaboom of doom!

The strategy here is to balance new technology with the ability to produce old technology in large enough numbers to keep the enemy at bay.

Graphically O.R.B. offers some very pleasant visuals that don't require ridiculous system requirements. Environments are graphically rich with nice effects such as distant nebulas and asteroid fields that consist of large menacing rocks with a light and dark side. The ships are all nicely detailed and feature pleasant Homeworld-esque effects such as long trailing engine wash and powerful beam weapons that slice through hulking enemy capital ships. The sonic effects are quite good and full EAX means that surround sound speaker setups are put to good use. The music however takes the Homeworld clone factor too far as it's basically the same style of New Age ambient.

Despite the criticisms raised, O.R.B. is a well-engineered game that literally honours Relic's classic with visually stunning graphics and a very playable game despite some flaws. Those that couldn't get the hang of RTS in full 3D will find this game equally difficult but for those (like me) that loved Homeworld, O.R.B. is a great way to pass the time until Homeworld 2.

Jere Lawrence

Hearts of Iron

Developer: Paradox Entertainment ■ Publisher: Strategy First ■ Distributor: Auran ■ Price: \$89.95 ■ Rating: G ■ Available: Now

Buns of steel?

Games like Hearts of Iron are these days few and far between. Perhaps because it takes a more mature, or even, dare I say, a more intelligent gamer as these complex strategic simulations have a learning curve measured in days rather than hours.

Hearts of Iron is essentially the struggle of the three great doctrines of the 20th century, democracy, fascism and communism to dominate the world and shape history. The timeline covers all the nations from 1936-1948 and almost every nation that existed at the beginning of 1936 can be controlled. The economies, politics, industries, military strategies, and scientific developments of each nation are all represented in highly realistic detail and diplomacy has just an important role to play as military conflict in your quest for international victory.

Strengths

The game is complex because you need to manage resources as well as your home population's level of "dissent", while carrying out technological research and building military forces. The technological research tree is highly advanced with 14 different fields and you can change the course of history by researching super weapons (including nuclear) and fostering better production capacities. During combat, it's possible to have over 100 different ground, air and naval forces fighting on the divisional level.

The game is completely real time, not turn based but time compression can be manipulated and the time and date of an

attack set in order to coordinate all your forces together. In multiplayer, any one of the 8 players can pause the game, but after 30 seconds any other player can unpause it, which invites interesting tactics such as orchestrating attacks on multiple fronts.

Graphically the game map is similar to Risk, but offers different view modes such as political, economic, geographical and weather. Every country's units are animated differently whether they're air, naval or military and there is an option to have military standard icons instead of the default sprites.

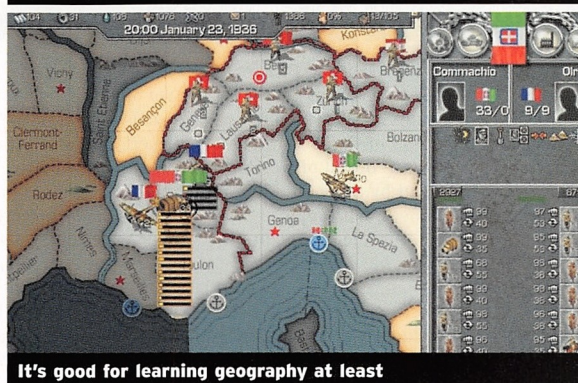
The sound effects are what you'd expect for this kind of game, but as a bonus you do get two hours worth of classical martial music (including Wagner of course) that depending on your music taste, you'll either like or find repetitive.

Weaknesses

During play constant pauses to issue orders is acceptable except when it comes to sending air squadrons to attack. As there's no option that allows air raids over a given length of time, each attack has to be tediously micro-managed. It would also be helpful to have a communication system that alerts you when units run low on resources, at the moment in the game you have to click each unit in the field regularly to assess its status and they can starve if supplies run out. The game has a few bugs and the manual that ships with the title is poorly done, but a revised manual is available for download on line. Finally, as



So much detail, so little time



It's good for learning geography at least

you'll need to invest many hours in the game to thoroughly understand it, you will indeed need to accompany Hearts of Iron with buns of steel!

Conclusion

Hearts of Iron will appeal to anyone who enjoys alternate history scenarios and strategy games, not just war gamers. It's an engrossing and highly educative game and as any country and side can be played, has high replay value. There is the added bonus of a map editor for further customisation and multiplayer mode over IP, LAN or Valkyrienet, the game's match server. It's not the game for someone who wants to knock over a campaign in under an hour, and it does have a few limitations, but overall these do not detract from this epic World War II strategy game.

Jere Lawrence

SYSTEM

NEED
PII 300
64MB RAM
2MB videocard
120MB HDD

WANT
P3-450
128MB RAM
2MB videocard
250MB HDD

MULTIPLAYER

Yes

ONLINE

www.stop-fascism.org
Those wacky zany anarchists are at it again! Includes links such as:
Big Mac Attacked, Operation Buy Less, Action Alerts, Cyber Scum and all time our personal favourite:
Is your employer an evil-son-of-a-bitch? Report him!

RATING

FOR

Play any country
Technology Tree
Real-time

AGAINST

Simple graphics
A few bugs
Needs streamlining

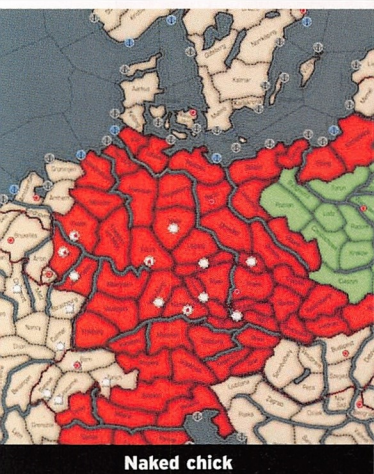
OVERALL

Not much visually compared to other games, but rich in historical detail.

73



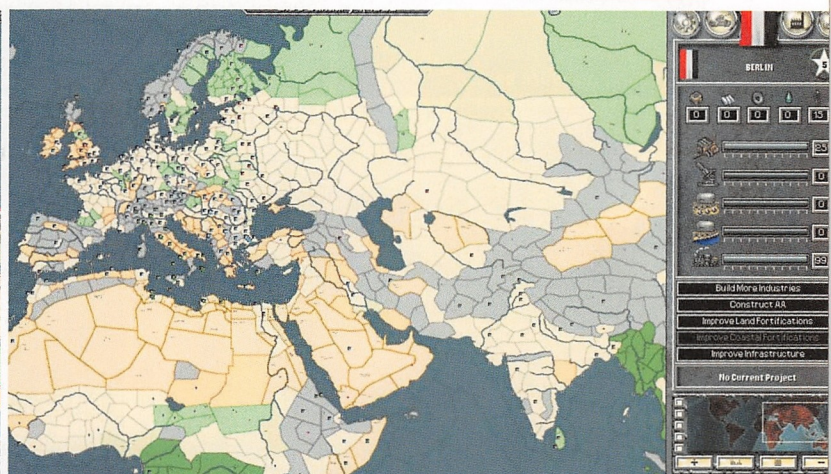
North African campaigns - dusty



Naked chick



Man on bicycle - these things are easy!



Strike Fighters: Project 1

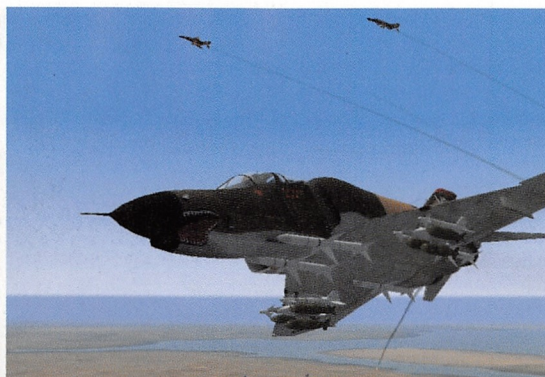


Developer: Thirdwire ■ Publisher: Strategy First ■ Distributor: Auran ■ Price: \$59.95 ■ Rating: G ■ Available: Now

Second time lucky? Nah, it's crash and burn again



The F4 Phantom. Any questions?



At least he seems happy about it?

SYSTEM

NEED

P3-450
128MB RAM
16MB Videocard
500MB HDD

WANT

P4-GHz+
256MB RAM
GeForce3
500MB HDD

MULTIPLAYER

Yes

ONLINE

www.thirdwire.com
It's the developer's official site, full of screenies and pictures of stuff you won't see in the game because it just freaking doesn't work properly.

Apparently Strike Fighters: Project 1 was originally released as some kind of Wal-Mart super budget value pack add-on to buyers of Cap'n Crunch or some other obscure brand of North American cereal and by all counts it was little more than a Beta, with many elements simply not implemented at all. So what, if anything, has changed for the retail release?

Strike Fighters models a bunch of Cold War era aircraft including the Super Sabre, A4 Skyhawk, the Starfighter, and the F4 Phantom. The advantage of using these aircraft is that there are very few other combat sims out there with these airframes modelled (the F4 was included as an extra plane in Strike Commander's expansion Tactical Operations way back when the world was very young). The disadvantage of using these aircraft is that they form part of that 'blah' period of aerial combat history. The romance of the prop-driven WW2 fighters is past, and the big exciting jets of the future are yet to be built. You strap yourself into your F4 and think... who cares?

Who indeed

Not only that, but Tripwire has also decided to set most of the campaign in the desert. This keeps the pressure off their pleasingly attractive 3D engine, but given that most of these planes were designed for use in North Korea and saw action over Vietnam it's a shame that these more interesting campaigns weren't included.

All that said, the game is attractive to look at. Aircraft models are extremely highly detailed and all the necessary control surfaces move appropriately, including some of the more unusual airbrakes and wickets on the older planes. The enemy goes down in flames, bits fly off after missile strikes, and sun glare and g-effects are reasonably well modelled.

Unfortunately, the rest of the game seems to be kind of missing. These jets are some of the first to have various different HUD modes and targeting systems, but none of them can be selected properly. Most obviously, the HUD-mounted gun sight is supposed to track your current target (using a Lead Computing Optical Sight System), but

instead it just stays in the middle of the screen. Air-to-air missiles also seem to just lock automatically and instantly, or not at all, and at times it can be difficult to coax your avionics into letting you know how many missiles you have left.



The Sabre, pleasure bent



Air-to-ground? Please?



Beautiful aircraft models don't a complete game make



What's up bignose?

Strike invaders

The game has both Arcade and Simulation modes and an Instant Action button, but the Arcade mode in particular offers little more than a sort of Space Invaders with 3D graphics. Air-to-ground targeting doesn't seem to work at all, and you have to wonder because the manual makes absolutely no mention of air-to-ground combat, skipping easily past air-to-air and onto the aircraft listing. Air-to-ground weapons are catalogued though.

What's more, the wingmen won't respond to commands to attack ground targets, and seem much more comfortable just going off and doing their own thing, which can make some missions extremely difficult to complete.

Good points include the virtual cockpits, which maintain excellent usability at any of the various zoom levels, and have a well-implemented padlock view. Also, the flight models of each of the jets, while we can only guess at their accuracy, are all distinctive and offer decent variation in dogfighting styles.

Dogfighting sums Strike Fighters up quite well actually - it's a decent dogfighting simulation that tries to be all things to all men despite only having four obscure jets, a semi-complete campaign and no proper air-to-ground combat. Perhaps a third version of this game could repair (or rather, complete) some of the problems but really, at this stage, does anybody care?

Justin Hoffman

RATING

FOR

Flight models
Aircraft detail
Cockpit views

AGAINST

Air-to-ground?
Naughty wingmen
Dubious setting

OVERALL

A decent dogfighting game if you can manage to pick it up on the cheap

59

FALCON 4

Actually the state that Strike Commanders: Project 1 is in right now reminds us very much of another, much for famous combat sim still played by true enthusiasts today. That sim is Falcon 4, which on release was missing great chunks of itself, had shocking stability and didn't even work at all on a number of different setups. At least Strike Fighters is better than that. And who knows; since Falcon 4's release, a whole bunch of the fixes and rebuilds have been done by the fans themselves. Tripwire boasts on its website of how expandable Strike Fighters is, so perhaps there is a future for this game after all, in the hands of the people. Project 1 indeed - could the developers have any more obviously said "we are inexperienced in delivering complete products to a trusting audience"?

Ghost Recon: Island Thunder

Developer: Red Storm ■ Publisher: UbiSoft ■ Distributor: UbiSoft ■ Price: \$49.95 ■ Rating: MA15+ ■ Available: Now

Sounds filthy, but it probably isn't

If you are into reasonably realistic firstperson squad-based soldier sims then you are already no doubt familiar with the superb Ghost Recon, a game which was pretty much top of the class when it was released last year.

Picking up where the original left off Island Thunder sees you controlling a squad of highly trained killing machines and venturing into some extremely hostile enemy territory where the one thing you do know for certain is that you will always be seriously outnumbered.

Cigars aplenty

However this time instead of taking on hard line Russian communists looking to re-establish the Soviet Union you get to visit the tropical South American trouble-spot that is Cuba, around a decade from now. After having one too many cigars Castro has shuffled off his mortal coil. The vacuum left in the Cuban political landscape is considerable, with many factions looking to claim power and civil war threatening to scotch the first planned free elections in the country for longer



Too much detail?



The old team, now in tropical kit!

than most can remember.

The culprits behind the bulk of the fighting are a bunch of drug-funded warlords who like to call themselves the FDG (Funded Drug Guys? - Ed). They have been wreaking terror on some of the smaller islands surrounding Cuba and they need to be comprehensively shut down so that peace can prevail.

Island Thunder is definitely worthy of your consideration if you enjoyed Ghost Recon. The expansion pack captures all of essence of the original game and the new tropical environments help liven things up considerably. That said you won't feel like there is a lot of major changes on offer as the interface (which always was slicker than baby poo) is very much as it was in the original game.

Lost in the jungle

The visuals, while still powered by the original game engine, do look tastier than a dozen cheese enchiladas. The trees swaying in the breeze as well as the shrubs and other vegetation make for some exciting firefights as the enemy can remain hidden quite easily, so you have to be cautious while advancing.

There are a host of new weapons in the game with many more silenced guns on offer. These are especially useful in night fighting where you can wipe out lots of enemy units while their mates stand by oblivious.

The soundscapes are also excellent,

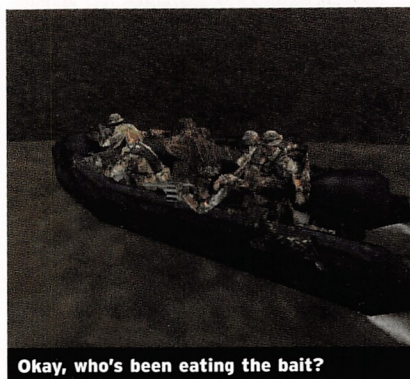
and even though the sound engineer adopted a 'less is best' approach, the use of minimal atmospheric sounds punctuated by screams, ricochets and the cacophonous noise of rapid gunfire exchanges makes this game a treat for the ears. The ocean rolling on the beaches is particularly impressive.

There are also a few new multiplayer modes which help augment the admittedly short single player campaign, which you will finish in around six hours or so. In this regard the game is a little short on value, but it is still a class act which will appease fans hungry for more.

Steve Polak

ARMED TORTOISES

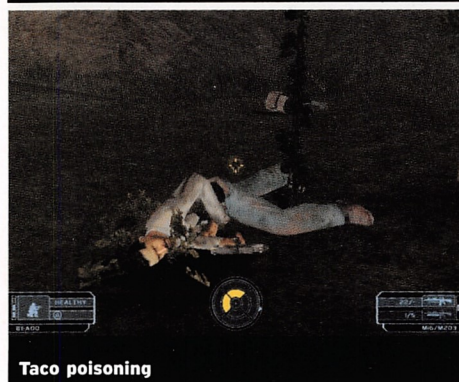
While many FPS shooters rely on speed and circle strafing with great skill if you are going to prevail, Island Thunder has a different approach. Being slow and methodical, like the tortoise in his battle to beat the hare, will yield results. Opening up the territory gradually, covering new firing arcs and using your teams for support as you move forward is very much the order of the day. Rush in and you will get more than your daily dose of iron (Lead, surely - Ed). This makes for suspenseful and often pensive gameplay as you creep forward not knowing if your next step will put you in the crosshairs of your enemy. Island Thunder might not be the fastest paced game in the world, but you will still find your ticker is kept thumping away when you are ambushed in the middle of the night.



Okay, who's been eating the bait?



Chopper drops are especially exciting



Taco poisoning



A pre-coffee mission. Ugly



Snipers now dominate more than ever

SYSTEM

NEED

P2-450
128MB RAM
16MB Videocard
Ghost Recon

WANT

P3-733
128MB RAM
GeForce2 Ultra
500MB HDD

MULTIPLAYER

Yessireebob

ONLINE

www.netropica.org
If you're planning to fight in Cuba you need to know about tropical diseases. This site will tell you EVERYTHING. Ew.

RATING

FOR

More weapons
Tropical theme
Soundscapes

AGAINST

Too short
A little slow
Limited singleplayer

OVERALL

Worthy addition to a veteran shooter. Will keep you going until Raven Shield

82

HOMM4: The Gathering Storm

Developer: New World ■ Publisher: 3DO ■ Distributor: Take 2 ■ Price: \$49.95 ■ Rating: G8+ ■ Available: Now

Another year, another HOMM4 expansion pack

SYSTEM

NEED

P2-300
128MB RAM
4MB Videocard (!)
HOMM4

WANT

P3-500
128MB RAM
16MB videocard
Shakira on toast?

MULTIPLAYER

Yes!

ONLINE

www.wizards.com
/magic

Why stop your slide into utter nerd-dom now? Join the every-growing horde of Magic: The Gathering players, for remember, They Are Legions!



Ambushed by a ravening pack of nerds



In Upper Nerdland, no one cares if you shave that pubic beard

Heroes Of Might and Magic is one of the most enduring fantasy strategy series and the latest expansion pack is likely to continue the popularity of the franchise.

In The Gathering Storm you get to play six new campaigns with the first five playable in any order. The sixth can only be attempted once the others have been completed and then you will go on to face the mad wizard Hexis who has been conjuring up a pretty nasty army.

Super Nerd

As far as expansion packs go the campaign on offer does represent substantial value, as it will take some time to complete. The fact that the code also now contains the all important multiplayer system is also mighty good. However it is a little annoying that the

game uses the external GameSpy approach and is as a result less flexible than some would prefer. That said multiplayer is hugely welcome.

Show us your nerd

So it is a case of 'so far so good' with Gathering Storm, and sadly this is where the first chinks in the expansion pack's armour are revealed. Despite delivering decent multiplayer action and a solid campaign there isn't really enough extra stuff on offer. There are four new creature types and they are mighty powerful, but they are also high level minions of Hexis and as such you don't see them much and so they don't have a great impact. Strike one.

There are also a number of new adventure objects, seven to be precise. Yet again this is a disappointment as five of these are conservatories (think glorified spell shop) each dedicated to a particular school of magic. In other words the new adventure objects don't really have much of an impact on play as they are basically the same and don't present new challenges. Strike two.

A nerd by any other name

Finally there are new heroes, but no new hero classes and so you feel like there is little room for

experimentation with new tactics when comparing the expansion pack to the original game as the basic tactics you refined with the original release isn't open to further development with new hero classes, so the game plays in a very similar fashion to Heroes IV. Strike three. . . .!

Bring out your nerd

So even though the new campaigns and multiplayer do make this a pack which fans of the game should consider, The Gathering Storm does feel like a poverty pack addition to the series and this is a great pity.

On the positive front the new music is good and some of the maps look reasonably different. Just don't expect much in the way of a new play experience as apart from multiplayer there is little there to change the way you play this game. And here comes the inevitable bit we all so often use when evaluating expansion packs: "if you liked the original game and hunger for more of the same give this a go". Nuff said.

Steve Polak

AGE OF HEROES

The real question is *Is Heroes better than Age of Wonders?* Fans of this stagnant yet popular turn-based fantasy combat genre have pretty divided opinions. Certainly the Age series has made up ground on its older more established rival. Age is generally acknowledged as better looking and for the first time the overarching strategy measures up to Heroes. However Heroes has such an established and successful blueprint that has been improved in subsequent iterations in the series. Both games are now at a point where we'd expect major changes to the formula for them to move forward, but they might just stay the way they are with little change and will still probably sell to die hard fans. Either way it is intriguing to note that at a time when realistic military war games are very much drifting towards realtime action, the fantasy sub genre stays resolutely turn based.



Victory for the nerds!



This is the winter of our nerd



Any nerd in a storm

RATING

FOR

Good campaign
Multiplayer
More HOMM4!

AGAINST

Not enough new toys!
No new hero types.
Not enough more HOMM4!

OVERALL

Get it if you have a hankering, but perhaps user-made maps will have the same appeal

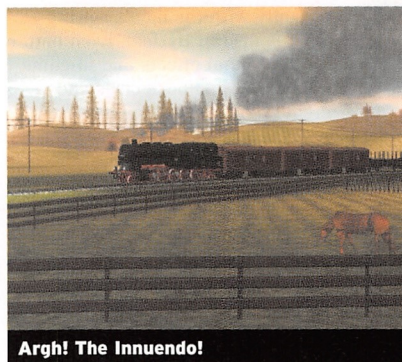
71

Trainz Ultimate Collection

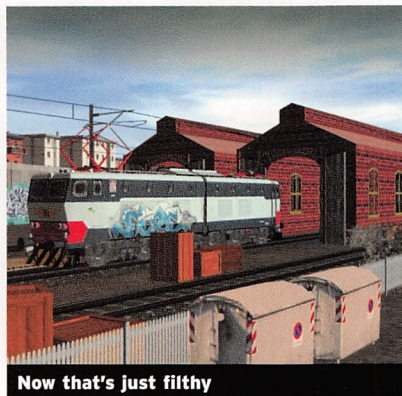
Developer: Auran ■ Publisher: Strategy First ■ Distributor: Auran ■ Price: \$79.95 ■ Rating: G ■ Available: Now



Bouncing dollars off the Fat Controller



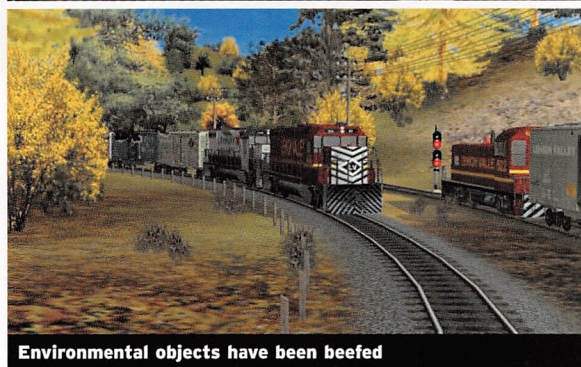
Argh! The Innuendo!



Now that's just filthy



A blue one, for the girls



Environmental objects have been beefed

SYSTEM

NEED

P2-400
128MB RAM
16MB Videocard
650MB HDD

WANT

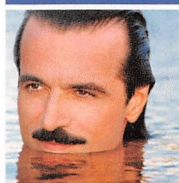
Athlon 1700+
128MB RAM
GeForce3
19" monitor

MULTIPLAYER

Yes

ONLINE

www.yanni.com
So what's lower on the social pecking order than a trainspotter? A Yanni fan. Here's the egomaniac himself sporting a handlebar moustache that would make Magnum PI feel woefully inadequate.



RATING

FOR

Elements
Modelling tools
Realistic models

AGAINST

Editor can be fiddly
System requirements
Install procedure

OVERALL

No Railroad Tycoon 3D, but well on the way to greatness

83

The problem with being young is that you don't have the money to buy everything you want, and the problem with being grown up is that it's hard to justify buying everything you want. I'm like that with model trains; I SO wanted a model train set as a boy but now, when I could buy one without thinking about it, I can't convince the other members of my family that I should be allowed to. Luckily Auran (venerable developer of Dark Reign) has come to the rescue with Trainz. Trainz is described as a railroad simulator, but I'd describe it as a virtual model railway set with endless locos, carriages, track and trackside adornments.

Trainz is sophisticated; it's like they sat down with all the model railway enthusiasts and asked them what they wanted, and then they wrote it. If you're seriously into model trains and have a lot of patience you'll enjoy Trainz. It's quite different to Microsoft Train Simulator (which I found rather dry) as it has targeted the modeller rather than a hard core train driver. While it is quite a good simulator, that isn't its forte.

All new package!

Trainz UC contains the base product as well as Paint Shed (for painting your locos and carriages) and a few extra locos and scenery. It comes on two CDs, which I installed, patched, then uninstalled, installed and patched again because the CD key is case sensitive, but you aren't told until you try to run the game! Sheesh. Running one of the provided scenarios will then give you a feel for the beautiful layouts it's possible to make if you invest enough time. The locos and carriages provided are quite realistic with a good selection of Australian items available. In fact, the game has a distinctly Australian bias as demonstrated by Robe River mines

featuring prominently.

On track

Once successfully installed I found that reading the manuals (both printed and the readme files in the application directory) essential to achieve anything. There are two main ways to play Trainz: design and build your own layouts from a bare baseboard; and watch or drive your trains around on the layouts (whether yours, Auran's or downloaded). Each provides its own level of entertainment.

Building a layout from scratch involves a fair bit of time, but so does the real thing and at least you don't have to wait for paint and glue to dry. You start with a 3D baseboard which you can push, mould and stretch any way you want. Then you can lay track, add textures, buildings, stations, points, signals and other items from the large number of components available. In fact, the choice can be overwhelming.

You then load the layout into Driver mode and select your consists (locos and carriages). The simulation works extremely well providing you've understood how the tracks operate. The signals and points work with each other and the block signalling system, and locos under autopilot respect the signals. It's really quite cool to see a train stopped at a double red signal, then move off once the next block is cleared. Trains also obey normal dynamics, and will not brake as fast downhill as they will on the flat. You can drive trains using all

controls (like in MS Train Sim) or you can just turn the forward/reverse knob like on a model train.

Because there's a lot going on during driving sessions the system requirements are pretty chunky. My Athlon 1700+ with a GeForce3 Ti 200 struggled occasionally on the highest detail settings, but it looked pretty good.

So...

Model railway buffs should buy Trainz - it might even work well as a prototyping tool for real layouts. The only problem will be that you'll be envious of the huge list of items available, and you won't have the great sound effects in Trainz.

Stuart Calvin

DE-JA VU?

Yes, constant readers will recall we did review Trainz way way back in PCPP#71 and awarded it a score of 81, saying it was a damn good idea without much of a game attached. However, the original review was of a special 'community-focussed' early release which, while complete, didn't have all the content that Trainz: UC provides. So why doesn't UC score much higher? Because the essential problem still remains: it's not much of a game. It's more of a creative environment for model railroaders that will probably leave salivating Train sim fans feeling uncharacteristically dry about the chops. But the foundation is undoubtedly there: once the Yardmaster module is complete and the player can enjoy 'missions' and even run a railroad company, this continually evolving title could one day come to eclipse the might Railroad Tycoon itself. Here's hoping!



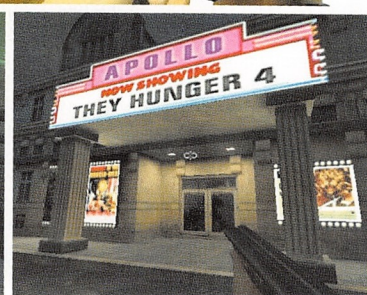
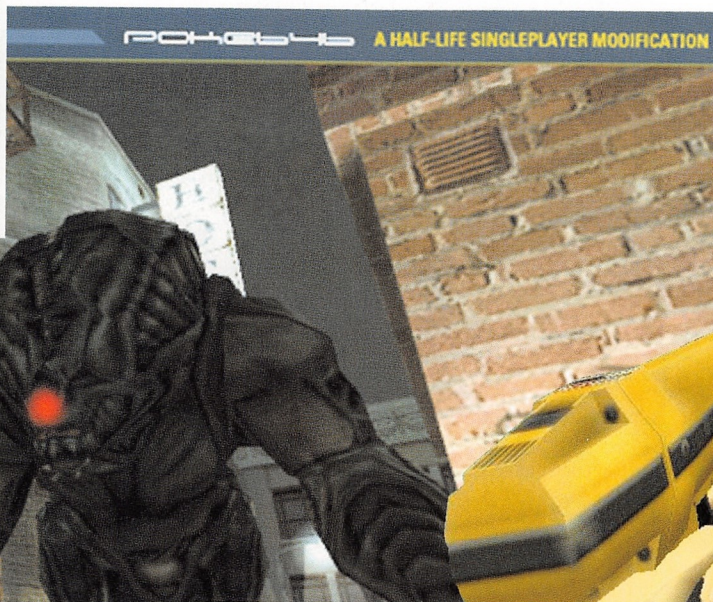
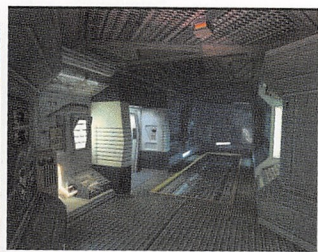
Funky foggy viaduct



Admittedly, it's damn pretty

HALF-LIFE Poke 646

For: Half Life ■ Version: 1.0 ■ Size: 63MB ■ URL: www.poke646.com ■ Rating: 5/5



over-the-top and fit in nicely not only with the mod's setting but the overall HL feel. Even better are the sound effects and in-game music that just ooze class and create plenty of atmosphere.

While the map design and exquisite hi-res textures are excellent, the environments have an overly urban feel.

Much of the action takes place in industrial areas such as sewers, warehouses, subways, and ghettos. While they all fit in with the mod's abandoned city storyline, some more variety would have been nice. One other complaint would have to be the mod's length.

Make no mistake, Poke 646 offers plenty of challenge for HL veterans even on the medium difficulty setting, but its all over a bit too soon. Then again,

quality always leaves you wanting that bit more.

Three new chapters and (thankfully) more interesting maps are promised in the Vendetta add-on which will close off the journey of Damian Reeves. Together with more of the same commercial standard visuals and sounds, players will also get their hands on an M4A1 for added firepower.

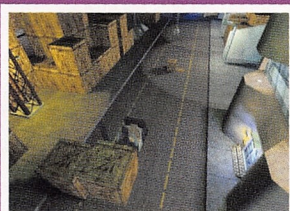
Poke 646 is a fantastic HL mod that does justice to the feel of the original game and improves on it in several respects, while never giving players an unwanted sense of de ja vu.

THE UNKNOWN MENACE

URL: www.planethalflife.com/menace

■ For: Half-Life ■ Rating: N/A

Playing a Rambo-type super green beret, you're given the unenviable task of entering an underground research facility which has been taken over by terrorists. Once inside, the objective is to neutralise the terrorists, known by the moniker WK (for Wanna Kill), before they can deploy a secret biological weapon rumoured to be more powerful than a nuclear missile. While the ultra-cheesy storyline that's a ripoff straight from The Rock doesn't impress, and overall the mod lacks some polish, there's enough action on offer to make this a reasonably enjoyable single player experience. Complete, but still in final internal testing, the mod should be available by time you read this.



Since its full release roughly a year ago, Poke 646 has won many accolades for being one of the top singleplayer mods for Half-Life. This is a timely review for anyone who may have missed the boat the first time around, but also because the mod team have just announced that an add-on pack, titled Vendetta, is currently in development and due out soon.

Poke 646 is set 13 months after the events in the original HL. You play the role of Damian Reeves, a technical assistant attached to the Poke 646 organisation, a combined

scientific-military team established to investigate all alien matters post-Black Mesa. After intercepting signals indicating a forthcoming alien invasion, Poke 646 builds a set of generator beams designed to wipe out the invasion portals once and for all. As luck would have it, Reeves soon finds himself alone, unarmed, and facing a Xen alien horde. The only way to survive is to find and activate the four generator beams.

Poke 646 features an entirely revamped arsenal of weapons all modelled and animated to near perfection. The weapons are not

THE SPECIALISTS

For: Half-Life ■ URL: www.specialistsmod.net ■ Rating: 4/5

Although this mod is still in beta release, it has already been praised as one of the best deathmatch mods out there. The team has set out to create a mod that captures all the thrills of a Hollywood action flick while maintaining a sense of realism when it comes to weapon effects and damage. Forget Sly Stallone and think John Woo. Not only are stunt moves and kung fu powerups

featured, but there are also maps unashamedly based on the lobby scene from The Matrix and the church shootout scene from Face/Off. With all graphical aspects of the mod already looking superb, some minor refinements in the sound department and improvement in overall stability should make the full release well worth the wait.



WARCRAFT 3: Rise of Krill

For: Warcraft III ■ Version: 1.0 ■ Size: 28MB ■ URL: rok.wc3campaigns.com ■ Rating: 4/5

Warcraft 3 fans haven't exactly been spoiled for choice when it comes to mods and user-created campaigns which is why it's great to see one as good as Rise of Krill to lend a bit more life to the original game. It's a fully featured stand-alone adventure which is extremely polished and has been obviously developed by a team of loyal fans.

RoK follows the exploits of Krill, an orc Warchief, once held captive by the enemy Human forces but who has since escaped. Krill returns to find the Horde scattered, leaderless, and facing annihilation. Luckily for Orddom, Krill discovers an ancient mystical herb that, when mixed with the power of a spellcaster, could make Krill and his followers an invincible force. The question is whether Krill can overcome his madness and harness his bloodlust to conquer the Human enemy and end Orc enslavement forever.

RoK follows the style and mood of the original WC3 very closely, so for those players expecting something completely new, the wait unfortunately continues. However, for those who couldn't get enough of WC3 and just want more of the same, RoK delivers.

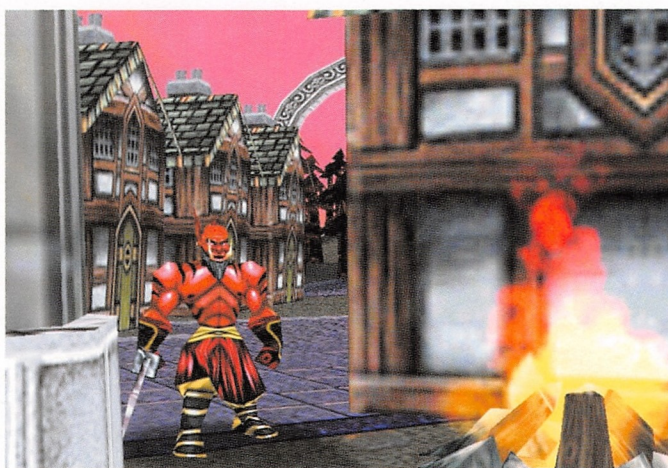
This mod features over 10 new maps and the work that has gone into the textures and terrain design is pleasure to see. It also offers a revamped list of inventive spells

and new units, all of which have been carefully crafted to ensure gameplay stays balanced. A custom-designed soundtrack and excellent dialogue really help to flesh out Krill and the mod's two other main characters: Brokk, Krill's loyal right hand man, and Martel, a mage who is the only one capable of controlling Krill's bouts of madness. All three heroes really come alive and it's a credit to the mod team that they are such strong and interesting personalities.

While the storyline is one of RoK's strongest points, even better is the overall stability of the mod which is surprisingly largely bug free.

The self-extracting installer makes life a breeze and players won't find themselves worrying about the technical problems which frequently plague other mods.

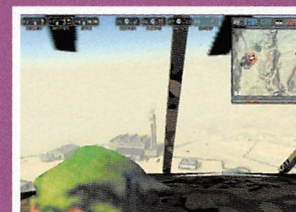
Given that RoK is a little easy to complete, players will be pleased to know that the same mod team have recently announced that development has begun on a second adventure campaign titled Fury of Kadesh. Details are sketchy at the moment but the promise of another mod of the same standard as RoK, with more new units and spells, is enough to keep WC3 fans waiting anxiously. Like Krill, they might even be driven to fits of insanity during the wait.



CONFLICT IN SOMALIA

For: Battlefield 1942 ■ URL: www.cismod.com ■ Rating: 3/5

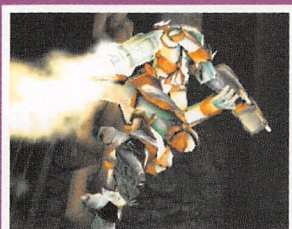
No prizes for guessing what this mod is based on. Avoiding any unfavourable comparisons with the jingoistic Black Hawk Down (interestingly, there is actually a BHD mod, also for Battlefield 1942, currently in development), the mod team have indicated that gameplay will be extremely realistic (aiming, stamina, damage, weapon recoil), making for a gritty experience that doesn't pull any punches. The modders certainly seem to have done their homework and the mod feels surprisingly atmospheric as a result. Battles will be based on the USA-Somalian clan skirmishes. It's still in alpha release so there's plenty work to be done but things are looking good for now.



KING OF THE SERVER

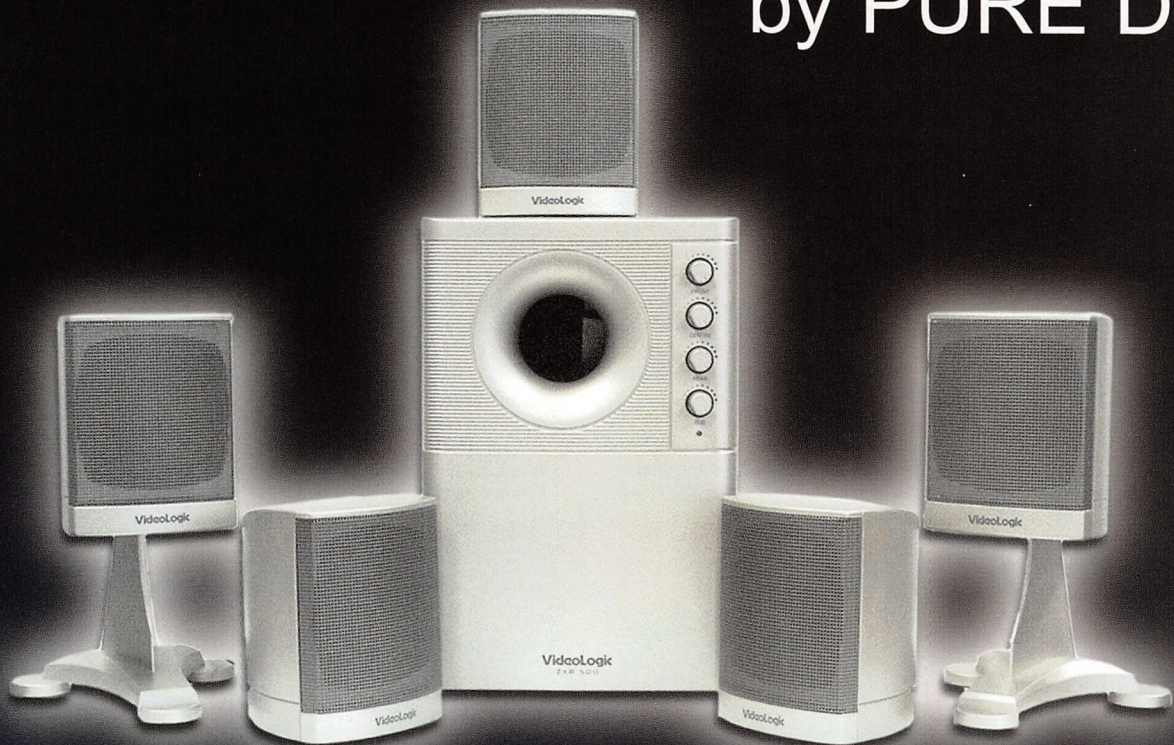
■ URL: www.planetunreal.com/kots
For: Unreal Tournament ■ Rating: 3/5

After starting life as a Quake 2 mod, like many others, KOTS is migrating over to the UT2003 engine for faster and better gameplay. Essentially this is a deathmatch mod with one difference. After notching enough frags, players will be able to improve their characters, quasi-RPG style, with some cool upgrades. A tally board on the website logs rankings to determine just who is King and saves character progress on its database. This latest beta release fixes a lot of the major bugs and is worth a look for players with fast connections who are after some straightforward frenetic deathmatch action.



VideoLogic

by PURE Digital



MODEL: VIDEOLOGIC ZXR-500



Atomic HOT Award
September 2002



PC User TOP BUY
Award December 2002

With superior sound from the **ZXR-500**, you will be immersed into a world of your own where nothing else matters...

ZXR-500 is a powerful 5.1 channel speaker system, engineered to provide all the thrills of surround sound audio, whether it is enhancing the earth-trembling sound effects in your favourite movie, blasting out gut-wrenching explosions in the latest games or immersing you in stomping music.



ZXR-200
2.1 Speaker System



Sonic Xplosion
6 Channel Sound Card

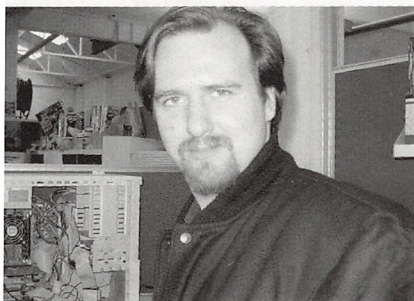


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www.westan.com.au sales@westan.com.au



Now just where the heck are we supposed to be putting our PCs? Once upon a time it wasn't really an issue as you could just bung your PC any old where. Our machines however aren't necessarily just word processors anymore but are instead complete multimedia centres that offer amazing surround sound solutions.

Rewind to the mid nineties and with the release of Java it was being poorly predicted by companies who should have known better that the future home computer will have a central server in the

roof or basement (sort of like ducted air conditioning) and a series of Java terminals scattered around the house for access. It's ok, we laughed until it hurt when we heard that as well.

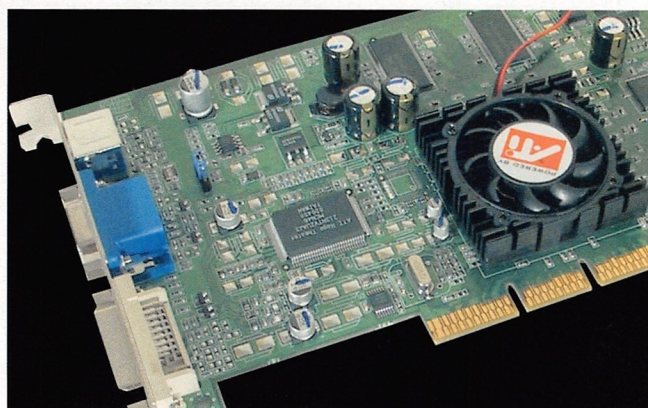
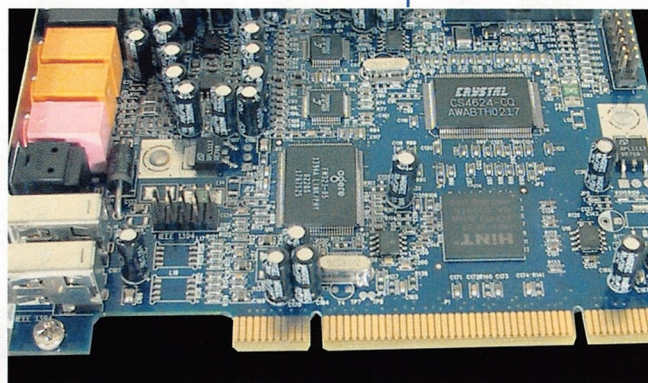
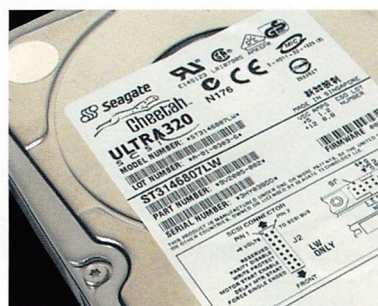
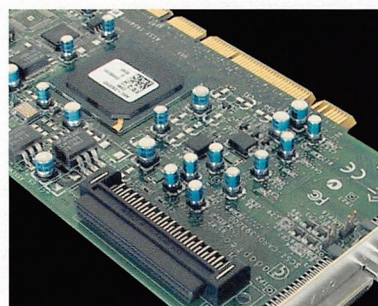
Then there was the Microsoft ideology of the "connected house". Besides including the ubiquitous "internet fridge" the PC was to take centre stage in the middle of the lounge room and would allow users to play music, watch videos, search the internet for what's on TV as well as pause and record live recordings. What Microsoft didn't understand though was that PCs aren't "compatible" with the lounge room due to the fact that they now rival comprehensive setups in terms of video and audio quality that would interfere with home theatre setups.

The reality is that the PC of today really needs its own room, or at the very least, a major part of a room. This is escalated by 5.1 - 7.1 sound setups that not only demand precision placement of the speakers but also exacting symmetry to get the most out of them. This is delightfully illustrated in an unnamed manual to depict a room no wider than a desk. Symmetrical yes, practical no. This raises another question. Should we let people who write hardware manuals breed?

Coming from someone who built his own set of rear wall shelves to create an idyllic surround environment for my PC I can tell you it's well worth it. Dolby Digital, EX and THX capabilities are fully established on our PCs along with impressive surround technologies such as A3D and EAX to fully immerse us in the rich sonic tapestry that compatible games offer. Lucky then that this month features a round-up of 2.1 to 6.1 speaker systems that proudly proclaim the power of PC sound.

Moving on from where to put the PC to how best to configure it, Asher Moses offers a revealing guide on tweaking your system's BIOS. We also examine some SCSI devices, a new 7.1 sound card and the new (or should that be old - you'll have to read the review to find out) Radeon 9100.

Jere Lawrence
jerel@next.com.au

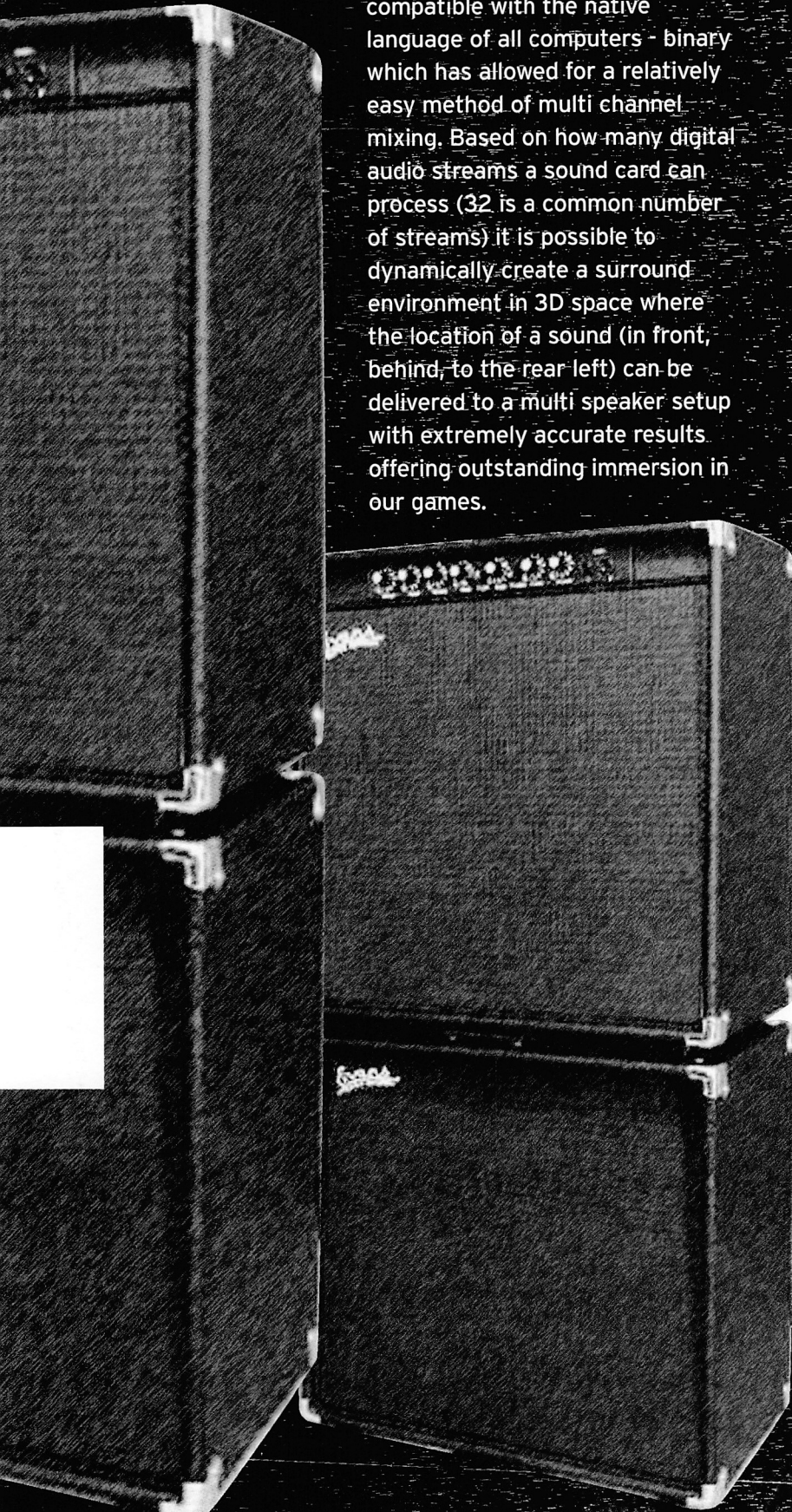


- 90 Speaker Roundup
- 96 Bios Feature
- 100 Adaptec SCSI Card
- 100 Seagate HDDs
- 101 DigiFire 7i
- 101 Radeon 9100
- 102 The Beast
- 104 Setup





SPEAKER ROUNDUP



Sound quality and home theatre systems have been gradually improving since the late eighties and with the advent of optical digital technology (CDs and DVDs) professional sound scapes are well within the reach of the home user. Digital audio also has the advantage of being extremely compatible with the native language of all computers - binary which has allowed for a relatively easy method of multi channel mixing. Based on how many digital audio streams a sound card can process (32 is a common number of streams) it is possible to dynamically create a surround environment in 3D space where the location of a sound (in front, behind, to the rear-left) can be delivered to a multi speaker setup with extremely accurate results offering outstanding immersion in our games.

Progression of Surround Sound - Analogue

Surround sound in various forms has been out since 1982 when Dolby launched its first surround sound format called "Dolby Surround". The first analogue surround system it could be broadcast and utilised on video cassette and essentially consisted of only 3 tracks, left, right and rear.

Dolby Pro Logic

It took almost 5 years to reach the "next level" but in 1987 Sanyo released the LA2770 integrated circuit; the first ever Dolby Pro Logic decoder. This extended surround sound from only three sources into four but used five speakers. Referred to as a 4-2-4 processing system Dolby Pro Logic cleverly yet complexly converts two audio channels into four channel output. Left stream (A); Right Stream (B); Information that is the same for left and right (A & B); The difference between the information between the left and right channels (A&B)

To put it simply, Pro Logic works by recording stream A and B out of phase but when the surround sound decoder receives the signals it shifts them relative to one another so that the signals are in phase again. Through this method of bringing the signals in and out of phase it is possible to identify "rear surround" signals from the front channels. Decoders are also important because they put the audio information through different filters and noise reduction elements to balance the surround effects and reduce noise and crackle (important on analogue formats).

Pro Logic II

This surround format still remains an analogue methodology but increases the speaker count to 5.1. This is a term that is regularly encountered when purchasing speakers and means that the sound source has five ordinary channels and one effects channel. Pro Logic II is essentially an extension of Pro Logic that uses similar analogue phasing techniques to create surround sound but allows for individual left/right channels for the rear speakers. This format is the most advanced of the analogue surround solutions.

Progression of surround sound - Digital

In the last decade there's been swift development of digital video and audio lossless compression methodologies (i.e. MPEG/MPEG2) as well as a high density optical storage format called digital versatile disk (DVD). Although it's possible to get a high quality speaker kit with analogue surround decoding, the more affordable units often rely on the sound card to decode the speaker information and send it off to the relevant speakers. This really isn't a problem as the PC of the noughts comes with a 5.1+ sound card or alternatively can be purchased for a, ahem, song.

Dolby Digital 5.1 and EX

The digital medium has actually made surround sound a lot, lot simpler. Instead of signals that are in and out of phase, each channel (or speaker) has its own associated sound stream. Essentially, these streams are recorded on a DVD as an audio file (like a .wav or .mp3) and simply played back through the relevant speaker. The other advantage of this digital medium is that it's very compatible with a multimedia PC and makes for an excellent secondary home theatre device, particularly if you're still living at home with a PC in your room.

The maximum number of channels that a standard MPEG2 DVD movie contains is six (one for each speaker if recorded in EX) which is handy because EX is a six speaker format that adds a rear centre channel for a six speaker setup. From a PC point of view, EX not only requires a six speaker setup, but also a soundcard that can output to 6 speakers. Considering that Hercules have a 7.1 card available for ~\$60 there are affordable solutions.

TDK S-150



This set of TDK speakers is interesting in that they don't use speaker cones at all. Instead they use an electrostatic system to produce sound using an adaptive diaphragm. This is a completely different methodology to cone speakers and works by vibrating air with a large, thin, conductive diaphragm panel. On either side (fore and aft) of the diaphragm two stationary conductive panels are charged with electrical current and it all comes together when the standard electrical audio signal is passed through the suspended panels. Positives charges draw the diaphragm one way while negative charges send it the other. The rapid change of positive and negative

charges causes the diaphragm to be pulled quickly backwards and forwards which makes vibrations within differing air pressures to recreate the recorded sound.

The subwoofer measures in at 40cms wide x 14cm tall x 16cm deep and produces clear, strong, effective bass frequencies that merged effectively with the satellite speakers and made for a delightful soundscape. Another very nice touch was that no matter where the subbie was placed, sounds still merged well and the overall quality of sound was very high. This is a nice feature as despite "literature" that claims that the direction of a subwoofers bass can't be discerned the reality is that this statement, more often than not is false

but in the case of the S-150's is true.

As already discussed, the satellites utilise adaptive diaphragm technology which results in speakers that measure in at 255mm tall x 75mm wide and 25mm deep. In other words, the satellites are tall, thin, quite aesthetically pleasing and produce great sound. Volume, bass and treble controls are all easily accessible from the right speaker but inputs plug into the subwoofer (which is generally under the desk) and can be a little inconvenient.

Overall sound quality was extremely good with bass sounds clear, powerful, deep and smooth. Maximum volume was also very good and you can easily achieve 97% volume before there is any distortion. Treble/high frequency sounds were also very clear sounding bright, clear and sharp. Now, TDK, when can we expect a 5.1/6.1 kit??

Price: \$242
Distributor: Techbuy
URL: www.techbuy.com.au
Phone: 02 96481818

Admirable, excellent sound output at an affordable price.

95

HARMAN/KARDON SOUND STICKS

Despite the almost cringe-worthy and very iMac looking see-through design of the sound sticks these remarkable speakers produce delightfully clear sonics even at high volumes. It is important to note however that these are a set of USB speakers and therefore do not use a sound card, but rather receive the raw sound data from the USB port. There are no secondary inputs so it's not possible to play sound from any other source other than your PC which is a shame because these speakers would be perfect for a high end soundcard. Still, this is really only a problem if you have an advanced EAX/A3D sound card otherwise those with onboard sound have nothing to lose and everything to gain from these speakers.

The subwoofer is dome shaped and therefore a little hard to measure but stands in at around 30cm tall. Curiously, bass output is directed to the bottom (as opposed to out the sides) and four legs raise it ~2cm off the ground to allow the sound to dissipate. The subwoofer performed admirably and even though there were no hardware controls to increase the bass level, low frequency sounds remained clear and powerful.

The satellite speakers or "sound



sticks" are equally exemplary. Each sound stick features four tiny conical speakers that are 20mm in diameter, have a circumference of 62.8mm and stand ~30cm tall. Irrespective of their small size, the satellites produce crystal clear sound at a level that is similar and even slightly superior to the TDK S-150's.

Controls are a little lacking as there's basically a bass volume control on the subwoofer and 2 RCA inputs for the satellite speakers. Volume levels and automatic gain can be turned on from the Windows volume control but a few more knobs would not have gone astray.

If you haven't caught on by now these are an excellent set of speakers that produce brilliant sound. Treble frequencies are bright, clear and a delight to listen too. So clear actually that the resonance of a guitar string pluck was so clear that it seemed you were sitting next to the player himself. Bass frequencies were strong and discernible and the overall listening experience was a pleasure.

Price: \$496
Distributor: Next Byte
URL: www.nextbyte.com.au
Phone: 1 300 361 119

Extremely high quality sound but too expensive

88

ALTEC LANSING 5100



The subwoofer is a decent size and measures in at 30cm tall x 33cm deep x 14cm wide and produces average bass frequencies. This isn't saying that the subwoofers bass output was bad only that it lacked the deep, powerful "make you feel like you've been punched in the guts" kind of output that the more expensive and more powerful subbies provide.

Satellite speaker performance is very good and these tiny little speakers really can reach very high volumes with only a small amount of distortion - an achievement given that the speaker cones are only

30mm in diameter with a circumference of 94.2mm. All the satellites are 18cm tall x 6cm wide x 2cm deep creating a very small desktop speaker footprint.

Surround performance was also above average and the 5.1 setup did successfully manage to create a "sweet spot" where all the sound channels melded together. The now famous THX audio logo sounded good but did lack a level of depth. As the speakers aren't THX approved though, this isn't really a surprise. DVD playback was also good with vocals clearly originating from the centre channel and its overall surround

performance is perfectly suitable for watching DVD's on your PC.

All speaker cables and inputs plug into the subwoofer so some spelunking under the desk will be required to set it up. There is however a corded remote that allows for the bass, treble, centre, rear and master volume to be conveniently adjusted. The remote even sits in a pleasant metal cradle for easier desktop access.

Overall sound quality is above average and treble frequencies have a pleasant brightness to them. Unfortunately the kind of intricate detail that could be heard in the Harman/Kardon sound sticks such as the decaying resonance of a plucked guitar string is absent but the listening experience was still quite satisfying.

Price: \$339.90
Distributor: Techbuy
URL: www.techbuy.com.au
Phone: 02 96481818

There are less expensive speaker solutions that offer similar output.

81

LOGITECH Z-680C

Producing pristine quality sound that is a delight to the ears, the first and most important factor of these speakers is that they support DIGITAL IN which allows for the purest representation of sound to be sent to the decoder with the least amount of interference. Another consideration is that the Z-680 comes with its own surround decoder that supports: Dolby Digital; DTS; Dolby Pro Logic II; Multi channel MPEG; 6 channel direct (EX); Phased Stereo (stereo x2) and plain vanilla stereo. What this amounts to is an awesome 5.1 setup that is equally comfortable plugged into your DVD player as it is to your PC. Although some scoff, another important factor regarding the Z-680's is that they are fully THX approved which isn't surprising seeing as sound output is so delightfully clear.

The subwoofer produces deep, powerful bass frequencies, stands 31cm tall x 31cm wide x 34cm deep and the main woofer which has a circumference of 81.64cm (26cm diameter) directs bass sounds out through the front and is convincingly directionless.

The satellite speakers all produce bright, crisp clear sounds and reproduce treble frequencies with

remarkable clarity so much so that I heard a series of demi-semi-quavers (a 1/16 note) from our test CD perfectly. As for measurements, the satellites are 20cm tall x 10cm wide x 12cm deep with the only exception being the centre speaker which sits horizontally and is 16cm tall x 21cm wide x 8cm deep. All the cone speakers have a diameter of 8cm and a circumference of 25.12cm. Another nice touch is that standard speaker wire is used to connect the speakers to the subbie/amp so you never need worry about a cable being too short - just go buy longer speaker wire.

Surround performance is excellent with functions to improve the experience such as the width of the surround sound sweet spot (narrow or wide) and "surround delay" that allows you to adjust the delay based on the distance of the rear speakers (you should know that for every metre of speaker cable you need approximately a 1ms delay). The DVD playback was truly fantastic and the 5.1 performance through a digital cable is clearer and produces a much better soundscape.



The main controller features a large volume knob and clear blue backlit LCD screen that displays relevant information. Thankfully all inputs plug into the controller instead of the floor based subwoofer and there's even a cordless remote to keep utilisation ultra comfy plus an

extra input for another audio source and a headphones out. At high volume levels the kit is also distortion free which we thought was great even if the other magazines in these offices didn't. Ten points if you can guess what my next speaker purchase will be.

Price: \$784.40
Distributor: Techbuy
URL: www.techbuy.com.au
Phone: 02 96481818

Expensive but comprehensively fulfils 5.1 needs. Bring on the 6.1 kit please!

97

VIDEOLOGIC ZXR-500



It wasn't that long ago that Videologic was renowned for their PowerVR range of cards but after the demise of the PowerVR chipset and NEC's decision to produce only for the Dreamcast, companies like Videologic had to reinvent itself or die. Now producing speakers, Videologic (also known as Pure Digital) are hoping to woo the market with an affordable 5.1 solution.

Standing 25cm high, 16cm wide and 31cm deep the sub-woofer features a wooden frame for better bass response and 4 knobs that allow for control of the front, centre, rear and subwoofer volumes. A

potentially annoying omission is that the ZXR-500 doesn't utilise a remote control or external master volume so if you plan on placing the subby at floor level you're going to have to "twiddle your knobs" and then use a software mixer for everyday volume adjustments.

The five cone based satellite speakers are 8cm in diameter with a circumference of 25.12cm. The coverings for the satellites however utilise a metal grill which may be a problem for those that prefer cloth coverings. The satellites however are magnetically shielded and are therefore safe to place beside a monitor or other magnetic sensitive

device. Painted in a dull silver finish, the unit isn't very aesthetically appealing but as these are speakers, sound output is far more important than looks.

The ZXR-500 is an impressive unit that offers excellent specialisation and good sound quality but doesn't approach the quality of the higher end speaker systems. When listening to a 5.1

track off a DVD movie the surround sound is great although dialogue can get a little washed out. Setting the centre volume higher helps but overall the middle speaker lacked "oomph". Treble a little too bright and bass was acceptable but at a high volume the speakers tended to distort and rattle.

Price: \$250
Distributor: Syslink
URL: NA
Phone: 03 9722 2089

Outputs above average sound but it's the price that makes these a winner.

83

CREATIVE INSPIRE 6.1 6600

The only 6.1 system that arrived for review, this set allows for the playback of Dolby Digital EX which is a 6.1 standard. Well, that's not entirely true. As the 6600's do not ship with a built in decoder it can't actually decode the EX signal which means that you will need a 6.1 EX compatible soundcard such as the Creative Audigy 2 or Hercules Game theatre 7.1. Another lacking feature is that these speakers which are marketed towards Audigy 2 buyers do not feature digital in and therefore does not get the best out of a high end soundcard.

The subwoofer stands 24cm tall x 23cm wide x 24cm deep and is quite similar to the Logitech subwoofer but without any kind of visible heat sink on the unit. Bass frequencies are output through the front by a woofer that has a diameter of 20cm with a circumference of 62.80cm. Unfortunately though the output wasn't really omnidirectional but rather could be *slightly* discerned.

The six satellites stand 13cm high x 9cm across x 7cm deep and the internal cone speakers have a circumference of 25.12cm (8cm diameter). Treble and high frequency response from these satellites is above average but doesn't manage to equal the same levels of brightness or

crispness as the more expensive speakers. This isn't to say that the satellites are bad in anyway as overall the sound quality is well above average.

Surround performance is excellent and the sixth speaker (rear centre) does play an important part in equalising rear sounds. That's one of the funny things about surround, when concentrating on something else (like your next frag) it's easy to disregard its existence and begin to wonder if it's working properly but turn off the rear speakers and you will instantly recognise the difference. The rear centre speaker creates this kind of effect. When it's on you aren't necessarily conscious of its existence but disconnect it and you will know.

Controls are a little lacklustre as only a corded volume and bass level control can be placed on the desk but it does at least have a headphone out jack that automatically turns off external speakers when used. All the inputs however are located on the subwoofer so setup and changes will require a miner's hat and shovel to wade through the spaghetti of cables under your desk.



These speakers produce above average sound but some treble frequencies can be a little tinny and although it doesn't distort much at high volumes does produce a hiss that is

audible at low to zero sound output levels. Bass response on the other hand is excellent and achieves deep powerful resonant notes easily. Definite value for money.

Price: \$286
Distributor: Creative
URL: www.creative.com.au
Phone: 03 9666 6500

A highly satisfactory and affordable 6.1 solution

88

hot sound



Arctic chill melts with this burn. Introducing the **Logitech® Z-680** speaker system. **450 Watts RMS of Certified THX®** surround sound pulsing through a six piece speaker system lets me be in control. This single, integrated system simultaneously connects to my gaming console, heats up my entertainment center, and ignites sound from my computer, all with stunning clarity. No need for heaters with audio power this hot.

- Built-in Decoder for Dolby Digital® Dolby Pro Logic II® and DTS®
- 5 x 53 Watt Satellites & 1 x 185 Watt Subwoofer
- Integrated Control Module and Remote

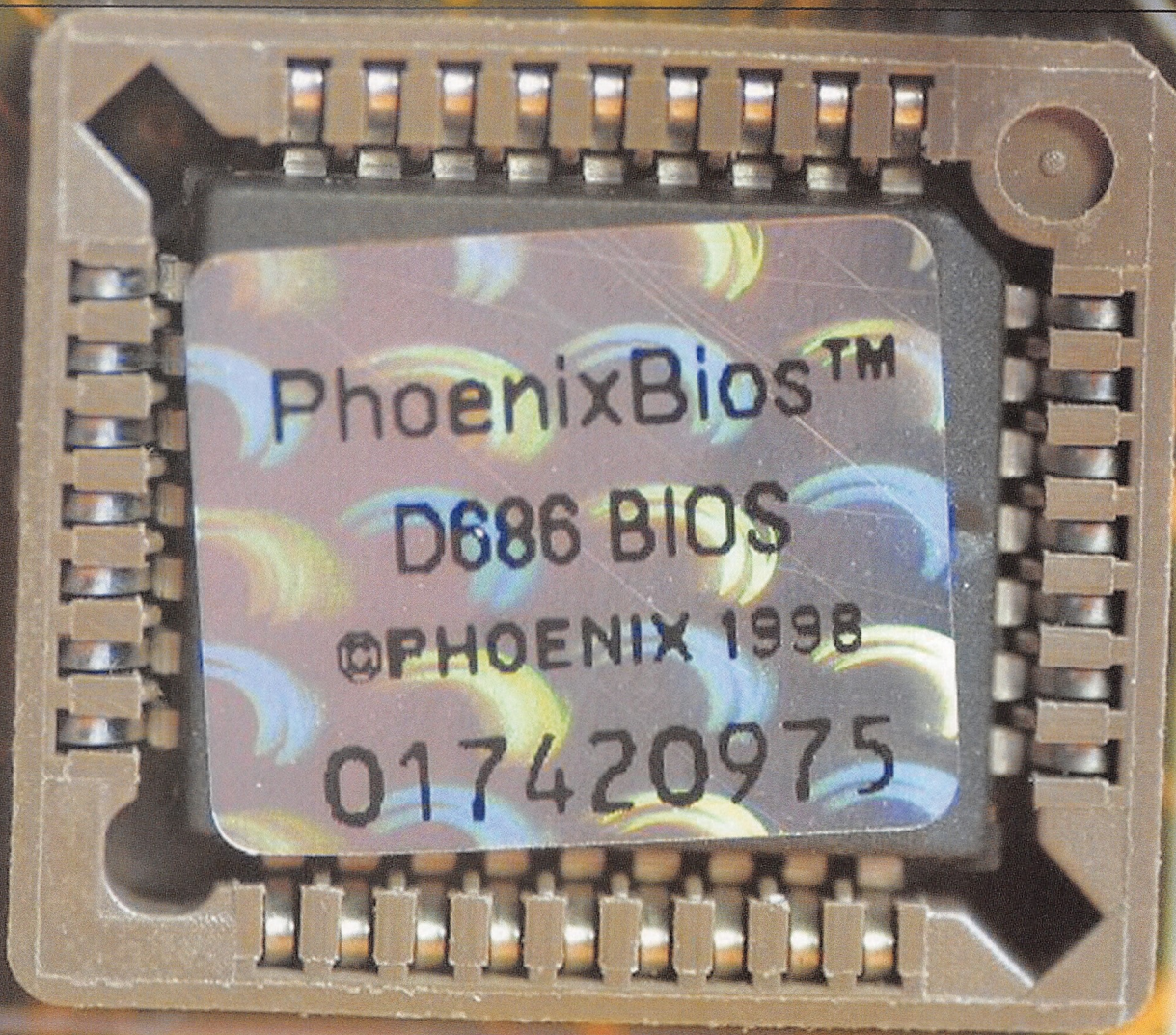


Z-680® THX® Speaker System



Logitech

www.logitech.com
or call (02) 9972 3711



BIOS ANOMALY

Whether we like it or not, the PC market is moving at a frantic pace and, unlike in the early days of personal computing, it's not uncommon to find your shiny new \$6000 beast becoming obsolete before you even get the chance to remove it from its shrink wrapping. Ok, that might be a slight exaggeration, but it's clear to see that the PC industry is moving at a much faster pace than ever before and it's often inconvenient and very expensive having to continually update your hardware configuration in order to keep up with the Jones', or even the little spoilt kid living down the street.

However, there is a means of garnering more power from your PC. This is because the average PC is not optimised for best possible performance as manufacturers use conservative settings to ensure across the board compatibility with software and hardware. Thankfully, in recent years it has become

increasingly easy to modify these settings (as we've discussed in previous guides), however, this is where another problem frequently arises. What does each setting do and how can you modify them for optimal performance?

Well, seeing as we've already discussed how to optimise your system from the Operating System (OS) level in previous issues, it's now time to dig even deeper - The BIOS.

What is a BIOS?

The first question many of you will need to have answered is "What is a BIOS, and how does it work?" Although you may not think so at first glance, the BIOS (Basic Input/Output System) is one of the three types of software that your PC requires to run smoothly (with the first two being the OS and Applications). However, the BIOS is quite different from your OS and applications in the sense that, rather

than being installed from some sort of portable storage, the BIOS is a read-only memory chip located onto the motherboard. Stored in its memory is a set of instructions that enables your computer to start an operating system and allows communication with the various devices in the system such as disk drives; keyboards, monitors, printers, and communications ports.

When you turn on your computer, the BIOS performs a POST (Power On Self Test), which makes a rudimentary check of the memory in your system and later in the boot process, checks other hardware components to ensure they are working properly. It then activates other components own BIOS (they too need a I/O handler) in your system and finally interfaces your hardware components with the operating system stored on your hard drive.

Other than giving your PC its first instructions upon startup, the

BIOS also holds a number of settings that control the workings of the hardware inside your PC which can be customised.

Let the tweaking begin!

Before performing any of the tweaks listed in this guide, it is important that you update your BIOS to the most current version (see boxout titled "Updating your BIOS"). Furthermore, the particular BIOS you see in the images happens to be the Award BIOS version 6, revision F6. The BIOS version that you are using may differ slightly from the one used here, so please take this into account when reading. That said, the basic settings in your BIOS should be very similar, and if you encounter any problems don't hesitate to whip an email over to setup@pcpowerplay.com.au.

In order to configure the BIOS you obviously have to first enter it. To do this, when turning on your

varies from system to system.

Once inside, you should be greeted with a set of menus that take you to various sections of the BIOS. The sections we will be focusing on in this guide are "Standard CMOS Features", "Advanced BIOS Features", "Advanced Chipset Features", "Integrated Peripherals", "Power Management Setup" and "Frequency/Voltage Control". Of course, not every BIOS version will feature the same menu setup as this; however, hopefully the general options contained inside these menus will be fairly similar.

Standard CMOS Features

Date - This option allows you to set the current date.

Time - Similar to the Date option, set the current time.

IDE Primary Master - This is your primary master IDE device, usually the hard drive. Selecting this option and hitting enter will bring up a sub menu that allows you to set the access mode, capacity, cylinders, heads, landing zone, sector and precomp of the device. I recommend that you set these to auto detect if you are not sure what you are doing.

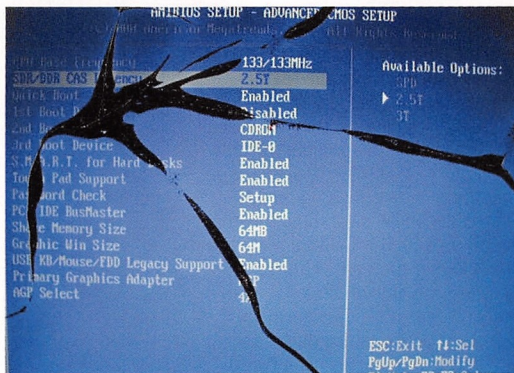
IDE Primary Slave - This is your primary slave IDE device. It has the same sub menu options as IDE Primary Master.

IDE Secondary Master - This is your secondary master IDE device. It has the same sub menu options as IDE Primary Master.

IDE Secondary Slave - This is your secondary slave IDE device. It has the same sub menu options as IDE Primary Master.

Drive A - Select the first floppy drive that is installed in your PC. This is usually a 1.44MB 3 1/2" drive.

Drive B - Select the second floppy drive that is installed in your PC. If there is only one floppy drive installed, select "none".



Video - Select the type of display adapter installed in your PC. This is usually EGA/VGA.

Halt On - This is where you can choose what errors your system will halt on during the POST. If you tend to boot up your PC without a keyboard, select "All, But Keyboard".

Advanced BIOS Features

BIOS Flash Protection - Enabling this option prevents the BIOS from being flashed by unauthorized users. This option is best left as "auto" for most users.

First Boot Device - Here you can select the first bootable device that the BIOS will search for an operating system on. This should be set to wherever you have your operating system installed, which is usually "HDD-0".

Second Boot Device - If the first boot device fails, the BIOS will search for a second boot device. For faster boot times, set this to disabled.

Third Boot Device - If the first and second boot devices fail, the BIOS will search for a third boot device. For faster boot, set this to disabled.

Boot Up Floppy Seek - If this option is enabled, upon bootup the BIOS will look for a floppy disk drive in your system. If there is no floppy drive in your system, it will display an error message. Best set it to disabled as it will improve your boot time.

BootUp NumLock - When set to "On", the NumLock key will be enabled on boot up. I like to leave it off, but it is a matter of personal preference.

Password Check - If a password has been set (from a option in the main BIOS menu), when set to "System" you will be asked for a password every time you turn on your PC. If "Setup" is selected, it will ask for the password every time you want to enter the BIOS. This is useful if you don't want people fooling around with your BIOS.

Interrupt Mode - Interrupt mode is for advanced IRQ allocations. There are two options, APIC and PIC mode. In APIC mode, the system is registered as an ACPI Uniprocessor system. This is an advanced ACPI interface allowing IRQ allocations up to 23. PIC is standard ACPI and allows for a Max IRQ of 15.

Boot to OS2 or DR-DOS - Enable this if you have more than 64MB memory and want to boot to other, much older, OS' such as OS/2 or DR-DOS.

HDD S.M.A.R.T. Capability -

Updating your BIOS

Before you begin customizing your BIOS, it is recommended that you update it to the most current version as this will not only fix any bugs found in previous versions, but newer BIOSes can also unlock even more customizable options. This can be done in a few simple steps:

1. The first thing you'll need to do is determine the exact model name/number of your motherboard. Some of you may already know this off the top of your head, but if you don't you can either check the box that your motherboard came in, or read the model name off a silkscreen that has been plastered across the motherboard itself.

2. Next you'll have to head over to your motherboard manufacturer's website and download the latest BIOS for your specific motherboard. You will also need a BIOS Flash Utility, which is usually located on the same site as the BIOS file itself. In this guide we will be using the Award Flash Utility.

3. Now it's time to make a bootable floppy, which for Win9x users will be your startup disk that you created when installing your operating system. If you've misplaced this disk, simply go to the "Add/Remove Programs" menu that is located in your Control Panel and then select "Create startup disk". Windows 2000 and Windows XP users will have to download a boot disk program to make the boot floppy for them. We recommend that you head over to <http://www.bootdisk.com> and look for a Windows 98 bootdisk.

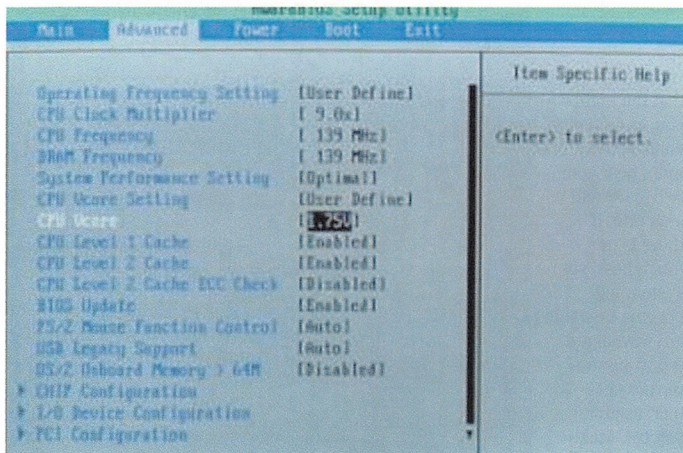
4. Place the .bin BIOS file onto the bootdisk along with the flash utility.

5. Reboot your system with the boot floppy in the drive and it will take you to a command prompt. Once there, type "A:\:" to access the floppy drive and then, use the flash utility to update the BIOS. If you downloaded the Award Flash Utility, type "AWDFLASH.EXE".

6. The BIOS flash utility will then ask you to enter the name of the BIOS file (e.g. "bios.bin").

7. The BIOS will then be updated (DO NOT turn off the computer while this is occurring) and you will be notified when the update has completed. When this happens, remove the floppy disk from the drive and reboot your PC.

computer after the memory test has completed (or even while) and the hard drives are detected, at the bottom left hand corner of the screen you should see something that says "Press <key> to enter setup". Usually, <key> is either "Del", "F1", "F2" or "Esc", but it





"Refresh Mode" is the speed at which each of the rows in the DIMM are refreshed. As per the JEDEC standard (the same people who certify DDR memory) the minimum amount of time that memory is able to retain its data (electrical charge) is 64ms (just over half a second). The reality these days though is that memory chips can hold their charge much longer than 64ms and are therefore capable of longer refresh times. This is advisable because it increases performance due to the fact that it will use less bandwidth as well as consume less power which reduces heat.

DRAM Read Thermal Management - This is a new Intel i845 feature that monitors DRAM temperatures and reduces the aggressiveness of the DRAM timings. This results in cooler DDR SDRAM but a slower memory performance. For optimal performance, disable this option but make sure you have your own adequate cooling.

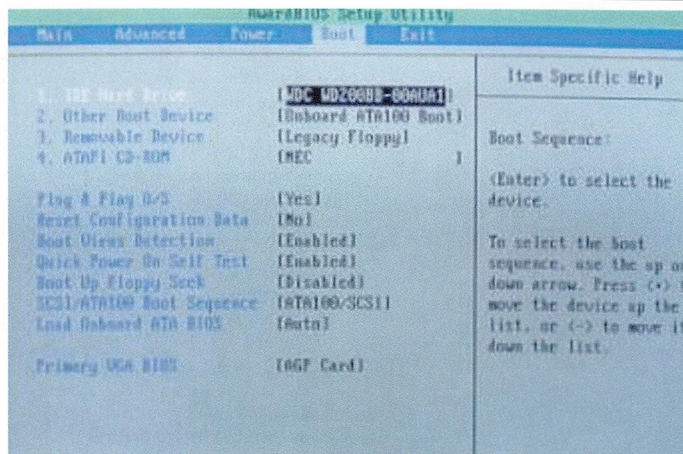
Delayed Transaction - It is a well known fact that the ISA bus is significantly slower than the PCI bus. When enabled, delayed transaction frees the PCI bus from slow ISA accesses by allowing the PCI device to write to an integrated 32bit buffer while an ISA device is occupying the system bus. If you use ISA devices in your system, make sure you enable this setting.

AGP Aperture Size (MB) - This is the amount of main memory that is allocated to the AGP device. Using this function the AGP card can process data from the main memory itself, instead of onboard memory. It is important to select the AGP Aperture Size wisely because too much will cause lack of memory for other operations and too little will give low graphic performance. The AGP aperture size should be set to half, or a quarter of your system memory. So, if you have 256MB system memory you should set your AGP aperture size to either 128MB or 64MB.

Delay Prior to Thermal - This is for the Pentium 4 only and is used when the CPU overheats. Setting this option to either 4 min, 8 min or 16 min is the time elapsed before the system will allow the CPU to throttle back up to full power. Optimal setting is 16 minutes.

Frequency/Voltage Control

CPU Host Frequency (MHz) - This option allows you to change the FSB (Front Side Bus) speed of your processor. The overall clock speed of your processor is worked out by the formula multiplier x FSB = clock speed. Therefore, if you have a multiplier of 9 and a FSB of 150MHz, then the clock speed of your processor is 1350MHz. Most processors have a default FSB speed of either 100MHz or 133MHz. The more you increase the FSB, the higher performance you will get. Increment this by 1MHz at a time until you experience instability, in which case you will reduce it by a few MHz and test again. Keep doing



this until you find the maximum speed your system will allow, without becoming unstable.

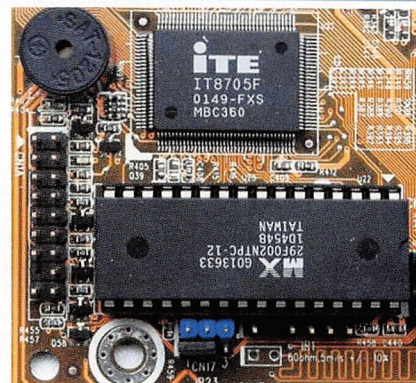
PCI/AGP Divider - This setting allows you to lock the PCI/AGP bus at a certain speed. The advantage of this is that you can set your FSB (Front Side Bus) speed much higher, without having the PCI/AGP bus as a bottleneck. Thus enabling much higher overclocking.

Host/DRAM Clock ratio

- This controls the DRAM frequency. You can set it to 100MHz, 133MHz, 166MHz or even 200MHz if you're motherboard supports DDR400 memory. If you have memory rated at 100MHz, try setting it to 133MHz for increased speed. If you experience instability, drop it back down to 100MHz. If you have 133MHz memory, try 166MHz and so on.

DIMM OverVoltage Control - This option allows you to adjust the voltage of your memory module/s. Increasing the voltage will help you maintain stability at high overclocked speeds. Be warned though that the higher you increase the voltage, the more heat your memory modules will generate. If there is too much heat, your system will become unstable anyway, defeating the purpose of the voltage increase. Make sure your system has sufficient cooling before overclocking/increasing the voltage for best results.

AGP OverVoltage Control - This option allows you to adjust the voltage of your AGP card. Increasing the voltage will help you maintain stability at high overclocked speeds. Be warned though that the higher you increase the voltage, the more heat your AGP card will generate. If there is too much heat, your system will become unstable anyway, again defeating the purpose of increased voltage. Make

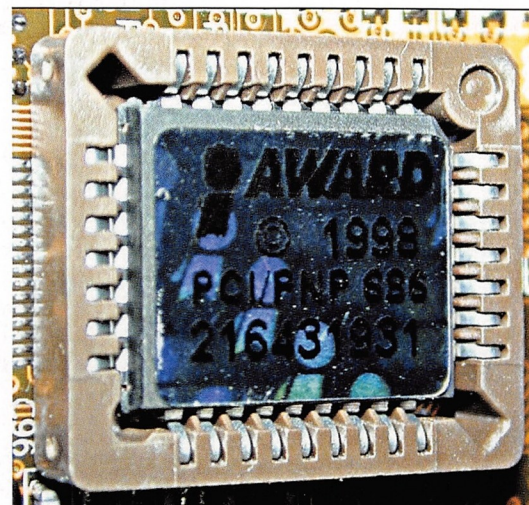


sure your system has sufficient cooling before overclocking or increasing the voltage for best results.

CPU OverVoltage Control - This option allows you to adjust the voltage of your CPU which will assist in greater stability at faster speeds but will also raise the overall temperature of the chip which could lead to failure, or damage if not properly tested or watched. Whenever overclocking, always run a burn in test on your system for about an hour and carefully monitor the results. At the first signs of instability or trouble, shut your machine down and let it rest for about ten minutes to cool down before changing the settings again.

Integrated Peripherals

On-Chip Primary PCI IDE - This option allows you to enable or disable the primary IDE channel. If disabled, IDE devices connected to the primary IDE channel will not function. If you



S.M.A.R.T or Self Monitoring Alert and Retrieval Technology monitors your hard drive's RPM, temperatures and IDE transfer data to make sure no data corruption occurs. Not all HDDs support this but if yours does, it is recommended that you enable this option.

Advanced Chipset Features

CAS Latency Time - The CAS Latency option controls the time delay that passes before the memory carries out a command. Simply put, the lower the CAS Latency selected, the higher performance you will be getting because the memory will carry out tasks quicker. However, not all memory modules will support such high speeds. Start off by setting it to 2 and if you experience instability, kick it back up to 3.

Active to Precharge Delay - This determines the amount of CPU cycles that active data can accumulate before the ram is purged. For optimal performance, set this to "auto".

DRAM RAS# to CAS# Delay - This option selects the time delay between the Row Address Strobe (RAS) and Column Address Strobe (CAS) signals. Obviously, the lower the delay, the better the performance.

DRAM RAS# Precharge - This is where you can select the number of CPU clocks allocated for the RAS (Row Address Strobe) signal to accumulate its charge before the DRAM is refreshed. If insufficient charge is applied, refresh may be incomplete which could cause data loss. For optimal performance, set this to "2".

Refresh Mode Select - The

are using this channel, enable it, if not, disable it to free up an IRQ.

On-Chip Secondary PCI IDE - See On-Chip Primary PCI IDE.

IDE Primary Master PIO - PIO stands for "Programmed Input/Output". This option allows you to select the PIO mode for your primary master IDE device. The higher the PIO mode, the higher the maximum throughput of your IDE device. It is recommended that you set this to "auto" because trying to set it to a speed higher than what your IDE device was designed for can result in data loss.

IDE Primary Slave PIO - See IDE Primary Master PIO.

IDE Secondary Master PIO - See IDE Primary Master PIO.

IDE Secondary Slave PIO - See IDE Primary Master PIO.

IDE Primary Master UDMA - This option allows you to enable or disable UDMA (Ultra Direct Memory Access) support. UDMA is a new protocol for the interface between your computer and the hard drive and is double the speed of the traditional ATAPIO/EIDE protocol. It is recommended that you leave this as auto so the BIOS can automatically detect whether your IDE device/s support UDMA.

IDE Primary Slave UDMA - See IDE Primary Master UDMA.

IDE Secondary Master UDMA - See IDE Primary Master UDMA.

IDE Secondary Slave UDMA - See IDE Primary Master UDMA.

IDE1 Conductor Cable - This is where you can manually select the transfer speed of your devices connected to IDE1 (e.g. ATA33/66/100/133). You can't set it to anything higher than what your device supports so this is best left set as "auto".

IDE2 Conductor Cable -

See IDE1 Conductor Cable

USB Controller - This option enables or disables the USB controller. Enable this if you are using USB devices. If you are not using any USB devices, disabling this option will free up an IRQ.

Init Display First - This option allows you to select the primary graphics card that your system will boot with. If you are using more than one graphics card (e.g. An AGP and a PCI card), select the one you want to use as the primary card. For most of you this will be the AGP card.

Onboard USB 2.0 Device - This option enables or disables the USB 2.0 controller. Enable this if you are using USB 2.0 devices.

Onboard Sound - This allows you to disable or enable onboard audio, if it exists on your motherboard. If you wish to use onboard sound, enable this option, otherwise disable it as it could interfere with your primary sound card.

Onboard ATA/RAID Device - This option allows you to enable or disable the onboard ATA/RAID controller. If you have a RAID array setup, enable this, if not, disabling it will free up an IRQ.

Power On By Mouse - This lets you select whether or not you want your system to turn on by clicking one of the mouse buttons. This is set to "Button Only" by default, which means your system will only start up when you press the power button on your case.

Power On By Keyboard - This lets you select whether or not you want your system to turn on by pressing a key on your keyboard. This is set to "Button Only" by default, which means your system will only start up when you press the

power button on your case.

Onboard FDC Controller - Here you can enable or disable the floppy drive controller. If you have a floppy drive connected to your PC, enable this option. If not, disable this option to free up an IRQ.

Onboard Serial Port 1 - This option allows you to enable or disable the first onboard serial port. You can also select its I/O address and IRQ. This is best set as "Auto".

Onboard Serial Port 2 - This option allows you to enable or disable the second onboard serial port. You can also select its I/O address and IRQ. This is best set as "Auto".

UART Mode Select - This option becomes visible if you have enabled serial port 2. Here you can select the appropriate modes for your infrared device/s. If you don't have any infrared devices, leave this option at its default setting.

UR2 Duplex Mode - This option becomes visible if you have enabled serial port 2. The Duplex Mode is the transition mode of the IR port. Full duplex allows two-way simultaneous transmission, while half duplex only allows one direction at a time. Set this to full duplex for the best performance.

Onboard Parallel Port - Here you can select the IRQ and I/O address for the onboard parallel port. This is best left as default unless you run into problems.

Parallel Port Mode - This option allows you to select the parallel port mode, with the default option being SPP (Standard Parallel Port). The other options available are EPP (Enhanced Parallel Port) and ECP (Extended Capabilities Port). EPP and ECP are both faster than SPP, with the ECP mode supposedly being better for large data transfers. For optimal performance use either EPP or ECP.

ECP Mode Use DMA - If you select the ECP parallel port mode, this option allows you to select its DMA channel. This is best left at default (3) unless you run into problems.

AC BACK Function - The AC Back function allows you to set the PC behavior for when the power comes back on after an outage. This is a matter of personal preference, but I have it set to "Soft-Off".

CIR Port Address - This allows you to manually select the CIR Port IRQ. This is best left at default unless you are experiencing problems.

Power Management Setup

ACPI Suspend Type - Here you can select the ACPI (Advanced Configuration and Power Management) suspend type that will be used. If you select S1 (Power On Suspend), power is still given to the system and the data is kept on the HDD and RAM but the processor is halted, whereas, if you select S3 (Suspend To RAM), the system/application state is saved to RAM (Random Access Memory) and power is cut to most components.

Video Off Method - This option allows you to select how your monitor will be turned off in power saving mode. The options are "V/HSYNCH Blank", "DPMS" and

"Blank Only". V/HSYNCH Blank causes the video card to shut down the vertical and horizontal sync signals to the monitor, as well as sending blanks to the video buffer. This is ideal for monitors without DPMS. DPMS (Display Power Management System) shuts down parts of the monitor's circuitry after a period of inactivity. Blank only writes blanks to the video buffer. For optimal performance, select DPMS.

Video Off In Suspend - This option allows you to select whether or not you want your video card to operate in power saving mode. The default setting is "Yes".

Suspend Type - Here you can select a suspend type of S1, S3, S4 or S5. S1 or Stop Grant is power on suspend. This just halts the processor and all data is kept on the HDD or RAM. S3 is suspend to RAM. This is where the system/application state is saved to RAM (Random Access Memory) and power is cut to most components. S4 is Hibernate (suspend to HDD). No power is given to any component, but your current OS settings, etc., are stored so when the PC is turned back on it goes back to where you left it. S5 is soft-off. No power is given to any system component, current configuration is not saved.

MODEM Use IRQ - This allows you to select the IRQ of your modem. This is best left as default unless you are experiencing problems.

Suspend Mode - This option enables you to select how long your system can be inactive before shutting down. This is a matter of personal preference, but I prefer it set to "Disabled".

HDD Power Down - Here you can set your HDD to power down after being inactive for a certain amount of time. Again, this is a matter of personal preference, but I prefer it set to "Disabled".

Soft-Off by PWR-BTN - This allows you to select the delay between when you press the power button to when the system turns off. If you set it to "3", then you will have to hold the button for three seconds. If you set it to "Instant-Off", then your system will power down as soon as you press the button.

PME Event Wake Up - Gives option of system waking up from power saving mode when a Power Management event (PME) occurs.

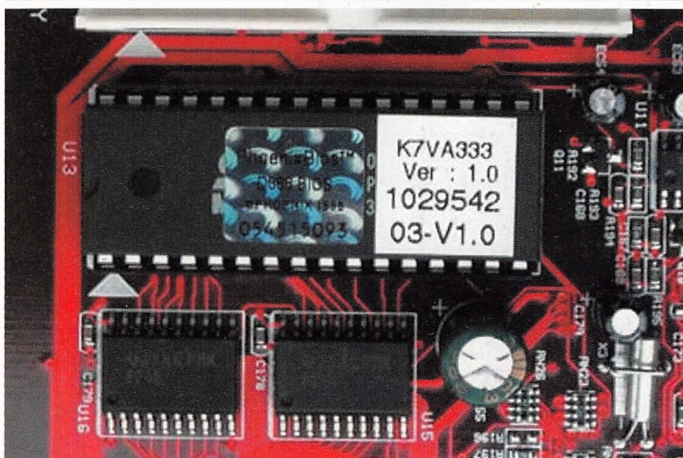
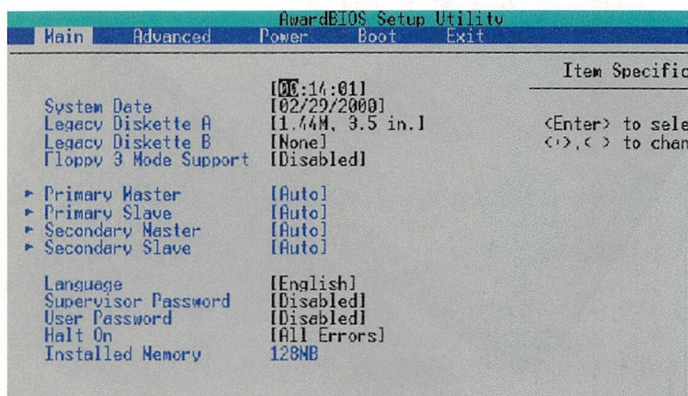
ModemRingOn/WakeOnLan - If this setting is enabled, an incoming LAN or modem call will awaken the system from power saving mode.

Resume by Alarm - If this setting is enabled, you can select the exact time and date for when your system will power on.

Summing It Up

If you've adjusted each of your BIOS settings as we've stated above, you can now save your settings, exit the BIOS and enjoy the tangible performance increase that will inevitably result. If you have any further queries, send an email to setup@pcpowerplay.com.au or sign up to the PC PowerPlay forums!

Asher Moses



Adaptec 39320D Ultra 320 SCSI

■ Price: \$548 ■ Distributor: TechBuy ■ URL: www.techbuy.com.au ■ Phone: 02 9648 1818

Adaptec's latest Ultra Wide SCSI controller is certainly something to get excited about, well, if you're into SCSI devices that is. The first point to note is that the card is fully PCI-X (the next iteration of PCI) and allows for a maximum transfer speed of 133MHz which is four times the speed of a standard PCI bus. Unfortunately though, PCI-X is technology that most of us don't even have access to because it is currently only iterated on motherboards designed for servers and the Desktop roll-out of the technology isn't due until the middle (or possibly later) of this year. Now PCI-X is all well and good if you have the afore mentioned server but for the rest of us this card will only function at 33MHz which does nerf this device.

Installation could have gone a little better as the first machine the card was installed in, an AMD XP1700+ on an Asus A7V333, failed to boot. The system saw the Adaptec controller, it saw the HDD and the SCSI BIOS could be accessed to format the drive if need be. There was even the option to tell the system to boot from the first IDE drive but all to no avail, the incompatibility

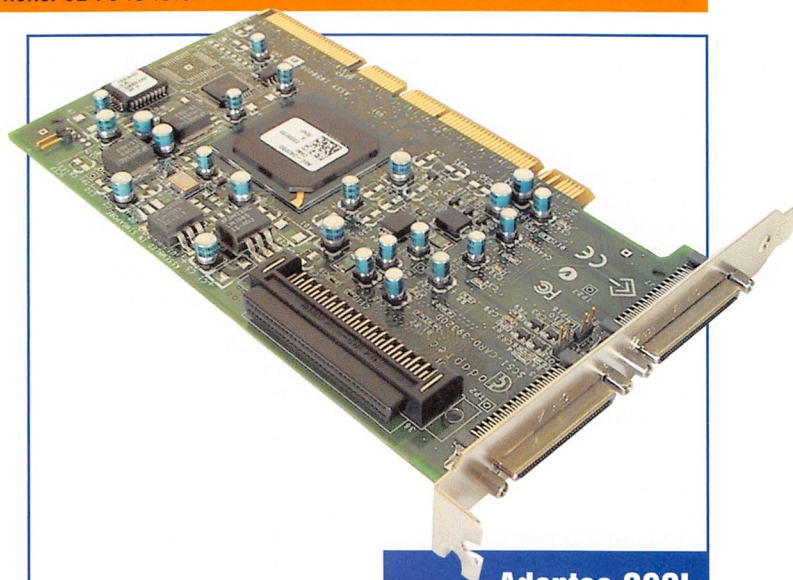
Nazi had spoken and all it could say was "no boot for YOU!" Moving the card over to an Intel system all went perfectly and required no installation or any kind of setup at all - the system booted and the SCSI card and drive were instantly recognised making for an effortless install.

The SCSI card is fully-featured and being dual channel can support up to 30 devices (actually 16 devices per channel but 1 address per channel is reserved for the SCSI controller itself).

Performance, even on a standard PCI interface was still very good and achieved a maximum data rate of 77.2MB/sec which is just about the maximum throughput of PCI. An element of perspective is obtained however when compared to PCI-X's data rate of 320MB/sec. Being optimistic this is a good thing because when you're finally PCI-X ready, you'll have a device to use from day one.

Overall, despite some initial installation hassles the 39320D SCSI controller performed well and would be a reliable choice for anyone who wishes to setup a series of fast SCSI devices.

Jere Lawrence



Adaptec SCSI

Capable of super fast PCI-X speeds even if our systems aren't. Ideal for the server/high end market.

76

Seagate Cheetah ST336732LW and ST3146807LW

■ Price: ST336732LW: \$872.85 ST3146807LW: \$2422.20 ■ Distributor: TechBuy ■ URL: www.techbuy.com.au ■ Phone: 02 9648 1818

For a number of advanced users SCSI devices represent a fast, viable solution to installing and integrating numerous IO devices such as Hard Disks, CD drives and tape backup units. It's also an excellent medium for extremely fast hard drives which is where the Seagate Cheetah range comes in.

The ST336732LW is a 36.7GB drive with an incredibly fast spindle speed of 15,000 RPM and an average access time of 3.6ms. The ST3146807LW on the other hand is a 146GB HDD with a spindle speed of 10,000 RPM and an average seek time of 4.7ms. It would be logical to deduce that the smaller, 15,000 RPM drive would seriously outperform the 146GB 10k offering but it doesn't. This is partially because of the tests performed and also because of the nature of HDDs. Due to the impressive 8MB buffer on both drives the minimum read size is an 8MB sequential block, sort of like how SMARTDRV works. Basically, where the 15k drive is going to be most effectively used is in a LARGE scale application that needs to make a lot of random accesses such as a very large database or applications where the data is not read sequentially. This is the area where the 15k drive will shine but as you can see from the results, unless you're an

integrator for the latter mentioned large scale app the 10k 146GB offered better results.

In regard to performance, the graphs really explain it all. Examining the 15k, 36GB drive you can see that the transfer rate for smaller cluster sizes particularly from 32KB to 512k shows how the faster spindle speed can improve performance with small randomly located pieces of data. However, once the 1MB cluster size is met, performance evens out and even sees the 10K offering eventually outperforming the 15k drive. Actually, as both drives are Ultra 320 even more performance could be yanked out of them on a PCI-X system but as explained earlier, PCI-X is only offered on server solutions at the moment. Another consideration is that the case these drives are housed in will need powerful cooling as both drives reached very high temperatures and the 15k drive in particular was impossible to hold after running the benchmarks.

Overall, if you're in the market for a SCSI HDD both these Seagate products are definitely high performance products with the ST3146807LW performing the best out of the two on a standard consumer level system.

Jere Lawrence



ST3146807LW

Better sequential performance than the 15k offering but Aye Curumba what a price!

64

ST336732LW

Suited for a specific application or server type. Very expensive for what you get.

65

Digifire 7.1

■ Price: \$169 ■ Distributor: Hercules ■ URL: www.hercules.com.au ■ Phone: 02 8303 1818

For a number of years Hercules have been reliably offering cost effective sound card alternatives to the predominately Creative market. Their latest 7.1 offering isn't about to overthrow the Audigy 2 but instead targets a more cash strapped market.

To get a negative aspect out of the way, installation wasn't as fluid as it could be due to some poorly integrated drivers. The problem was that the drivers required your system to be disconnected from the Internet in order to install. Let's just say that the code was obviously developed to take into account the average home consumer with a direct ISP connection and forgot about those connected to a firewall at work.

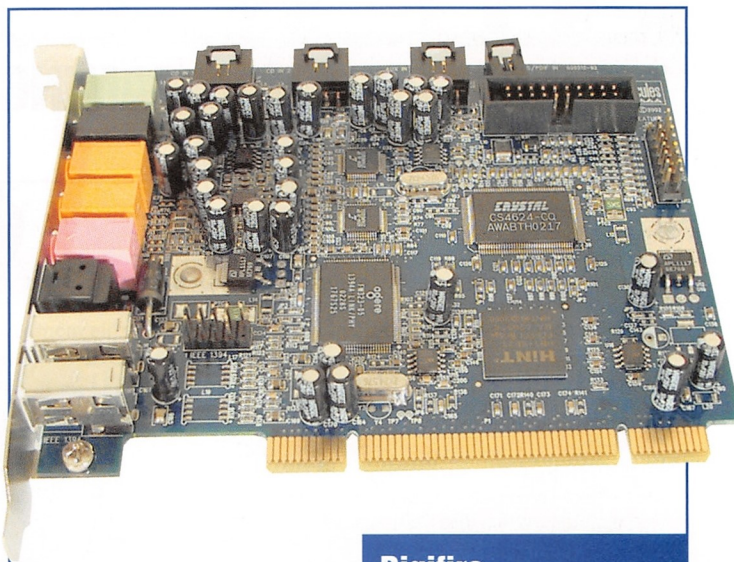
Sound quality is well above average and although the Digifire doesn't reach the quality of the Audigy/Audigy 2 it still performs well offering 20 bit 48Khz output. Basically this card is like an upgraded SB Live and sits comfortably between the latter card and an Audigy. In regard to output, the most significant factor is Digital audio out or Sony and Phillips Digital Interconnect Format (S/PDIF)

which makes an extraordinary difference. Analogue output from the Digifire was adequate but muddy with some slight hissing discernible. S/PDIF on the other hand was clear and with improved sound quality.

Surround was good but the centre speaker was a little loud and interfered with the front left and right channels. Unfortunately adjusting the centre speaker volume from the Digifire control panel achieved nothing. Another consideration is that the Digifire features no native surround decoding but instead ships with a copy of PowerDVD and a serial number to unlock the EX decoding. The addition of A3D along with EAX 1 and 2 is a nice inclusion as games ranging from Quake III to BF1942 will all function in surround sound.

Given that this card offers full 7.1 support (allowing for the playback of Dolby Digital EX) movies and 2 firewire ports for only \$169 it's definitely a bargain. Basically, if you can't afford an Audigy 2 the Digifire 7.1 would be a good compromise.

Jere Lawrence



Digifire

A highly affordable and worthwhile mid-range solution

82

Sapphire Radeon 9100

■ Price: \$210 ■ Distributor: Achieva ■ URL: www.achieve.com.au ■ Phone: 02 9742 3288

Explaining the new Radeon 9100 is a little tricky because ATI's latest offering isn't an upgrade to the 9000 but rather a rebadging of the original Radeon product. In order to really understand what is happening here it's necessary to look at the core chipset of the R9000 and also the R9100.

The R9000 which was always intended to be competition to the G4 MX440 features a stripped down core referred to as the RV250. The RV250 is based around the R200 but rather than an upgrade was designed instead to reduce die size and production costs. The next omission from the 200 to the 250 was the number of texture units per pixel pipeline which was reduced from two units to one which meant that performance in older games was good but modern quad texture games (such as UT2003) suffered. There were other modifications made as well but space doesn't permit them to be listed. Basically, to simplify the whole matter the R9000 is actually a scaled down version of the R8500. The problem with the 9000 though was that it left ATI with a low end product that outperformed (but didn't outsell) the G4MX440, an expensive high end product in the R9700 and no midrange product to

compete with NVIDIA's G3Ti.

This is where the 9100 steps in. To put the last paragraph into perspective, the R9100 uses the R200 core which for the most part means that it's a re-release of the original R8500. One new feature however has made its way into the 9100, namely FULLSTREAM technology. Fullstream technology is a scaled down version of the same function found in the R9700 and allows for pixel shader functions to be run over video streams. Although only currently supported through RealPlayer, Fullstream functionality can effectively smooth out blocky compression artefacts seen in low bandwidth video.

Performance was quite good overall but the 9100 did perform slower than other 8500's that we have benchmarked before. This is primarily because the default 8500 configuration is a 275Mhz core and 275Mhz memory (effectively 550Mhz memory because of double data rate).

The Sapphire 9100 that we reviewed however featured a core clock of 250Mhz and a memory clock of 200 (effectively 400) which explained why the 9100 performed slower than the 8500LE benched last year.

Jere Lawrence



Radeon 9100

Fully 8.1 compliant but core and memory speeds are slow. At that price though, it beats G4MX440

79

THE BEAST

THE MOST POWERFUL GAMING PC GOOD MONEY CAN BUY

It started with the 7500 and concluded with the 6000. We're talking about the Boston Acoustics Digital Theatre line of multimedia products which are sadly, no more. This is because Gateway obviously agreed with our impressions of BA speakers and entered into an agreement with them to only sell their multimedia product through the computer giant. It's all about sound this month.

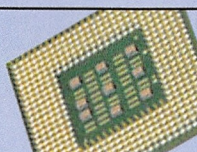


CPU, MEMORY AND MOTHERBOARD

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By doubling the number of controllers inside the chip, the P43.06Ghz can process two threads in hardware at the same time. The coolest thing is that the CPU usage now shows two charts, just like in Symmetric multiprocessor systems.

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You could buy a PC at the cost of this RAM but with 2GB you'll be moving so fast you can predict the future, and maybe make your money back.

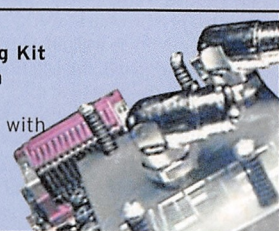
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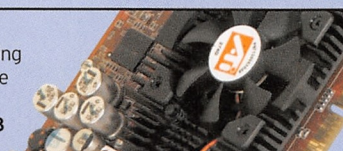


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For when it's not appropriate to have your volume so loud the walls shake and your gut aches. Super-comfortable gold plated sonic überness.

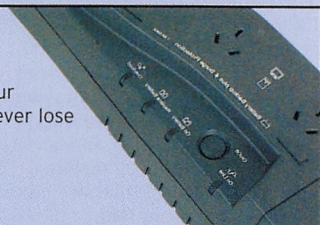
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This aluminium case is large, spacious and delightfully smooth. You won't shred your hands on sharp edges when installing boards into this case.

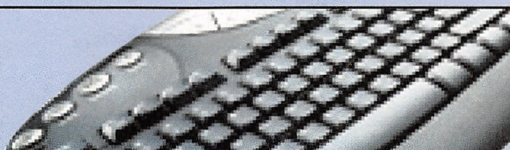
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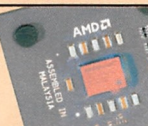
The same wheel found in sports cars around the world available for your PC. Fuzzy dice optional.

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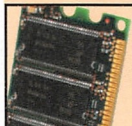


the beastie

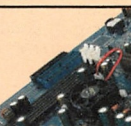
AMD Athlon 2100+
Extreme power for a low price. The beastie gets faster and more affordable.
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512MB of Hyundai DDR333 RAM
The perfect amount of memory for gaming. Fast at 333Mhz
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Should be considered an essential item, our DVD disk is so full of demo goodness we don't want you to miss out.
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Stellar (or sparkling) performance. Now at an excellent price.
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Full EAX 1 and 2 support plus digital out and 5.1 support for a ..."song".
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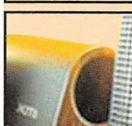
BenQ G774 17" CRT
Flat Monitor 0.25mm diagonal dot pitch. Affordable and reliable
\$295



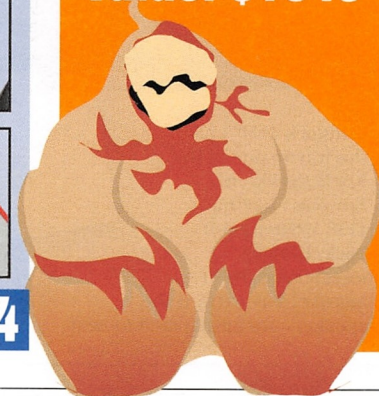
Black Millennium case
Mid size case with a clear side Perspex window and 350W PSU
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Speakers
Excellent bass and amazing satellite response.
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TOTAL BEAST VALUE:

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SETUP



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LETTER OF THE MONTH: LET'S TALK ABOUT THX

Q What exactly is THX-certification for speakers? Every site I've gone through says that it's good but what exactly does this mean? They never tell us the benefits of it. An example is the Megaworks 510D and the Megaworks THX 5.1 550. They're basically the same except that one is THX certified and has an extra SNR of 4db. I know the THX version would have less hissing (higher SNR), but what does the THX do? If it really benefits my ear, is it worth forking out the extra \$100 or so dollars for the THX version?

Andrew Lam

A History lesson begins. George Lucas' first feature film was THX 1138, sort of an electronic version of 1984, where individuality was sacrificed for the good of the collection. Since this film, Lucas has inserted sly THX 1138 nods in most of his movies, from the license plate in American Graffiti (THX 138), numerous lines in Star Wars ("Transfer prisoner to

component of a larger 'complete' entertainment system for your home and not just for your PC. The original essence of THX is a set of guidelines that resolve the problems that might negatively affect an audience's enjoyment of a film: outside noise (from the lobby or other auditoriums); inside noise (from the projector or air conditioning); audio distortion; obstructed or uncomfortable viewing angles; reverberation in the auditorium; insufficiently bright images and unequalised or poor audio. A Home THX Audio System, on the other hand, is the 'ultimate' in sound for multi-channel home entertainment systems. The system incorporates a series of patented electronic and loudspeaker developments designed to reproduce all multi-channel sources accurately in the home. The

driving force behind the creation of Home THX was the observation that conventional audio components could not accurately reproduce film soundtracks in the home environment as they were originally created by filmmakers. Deduction #1: we're talking film (DVD playback), and to an extent digital audio AKA music and not game sound. Two basic requirements for Home THX were identified: a need to correct the audible tonal and spatial errors caused by the playback of soundtracks designed for large theatres in the smaller environment of a home and a need to more accurately reproduce the complex and competing sound fields present in multi-channel sound playback. There really isn't a PC THX system as such, rather, each home THX product (controller, L/C/R speakers, surround speaker, subwoofer, amplifier, blah blah), that

can be a part of a PC system, solves specific problems in home cinema sound reproduction. By all means purchase THX products if they form part of your overall 'Home Entertainment' plan.

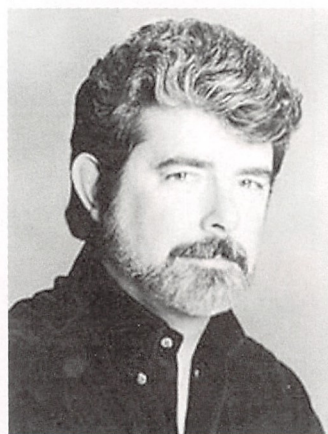


VIDEO SKIPPING

Q I have just installed WinXP Pro, clean vanilla as they say, and all my AVI files now skip in Windows Media Player especially anything off a CD. I have a relatively fast CPU (P3-866), loads of RAM at 576MB and a fairly good MX440.

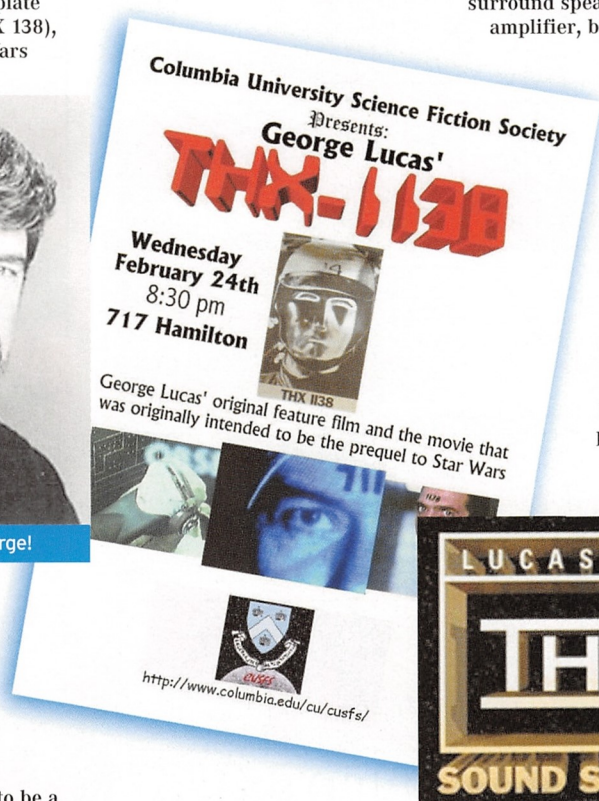
Phil McCracken-Wake

A Golly! A tough one. Hmm, how about "the DMO filter, which is used for DirectShow and Windows Media file types. It allocates an audio buffer that is two seconds long. This occurs to make sure that there is enough audio in the buffer for the Windows Media SDK to use if a specific video frame takes an unusually long time to process. However, DirectShow file types do not require this large a buffer. In the case of the .avi files, the AVI splitter loses track of how much audio has been delivered". OK, I cheated; a chicken farmer (I kid you not!) from Central Victoria helped me out on this one. How'm I s'pose to answer curly questions like that! Cut it out now. Apparently you download this from MS: Wm327609.exe which was released on 24 Sep 02 - search for it. I'd rather be reading 2Kb game-CD sectors backwards, looking for twin peaks, in hex, than look up that stuff.



Oooooooh Gorgeous George!

cellblock 1138") all the way to one of the battle droids in Episode I having 1138 written on its back. History lesson over. Short answer? Pay extra if the speakers are anticipated to be a



AUDIO, BUT NO VIDEO

Q I have just upgraded to WinXP Pro SP1 and am slowly fixing all of the problems that it's created. I've got nearly everything else cracked but I am stuck on a problem with my stupid InterVideo DVD software. During DVD playback, I get audio but no video. I've reloaded the software, patched it and bashed it but to no avail. Any thoughts?

Alan Davies

A Umm, did someone advertise Setup as a general fix-it-all including DVD stuff while I had my one day of the year off?! DVD stuff scares me but Chickenman (the Central Victorian www.cdfreaks.com chicken farmer) tells me that a supported fix is now available from Microsoft (since late Nov 02) but they rather you wait for SP2 - go figure, does that mean it's nearly here? If you want to fix this now go to

www.microsoft.com/downloads and search on InterVideo (the link is too stupidly long to print).

GAME WON'T START

Q I can't start my game! Asheron's Call 2 Configuration Tool reports "This adaptor does not meet the minimum requirements" and the game doesn't start! I have a Virge S3 and DirectX 8 on WinXP Pro.

Mika

A There are known video issues for AC2: Fallen Kings (in fact, I think there're known issues for all MS games and who plays one? Oh yeah, Mika does). But in general, you need to check a few things when a game will not start. Make sure: the video adaptor supports hardware transform and lighting (T&L) - can't be too careful. Also make sure you have the latest video drivers installed and the latest version of DirectX. Make sure that Direct3D is turned on and you have enough memory. To make sure that Direct3D acceleration is turned on: Click Start, and then click Run. In the Open box, type dxdiag, and then click OK. On the Display tab, verify that all DirectX features are enabled. If any are disabled, click Enable next to that feature. If some DirectX features are unavailable, verify that your video adaptor meets the minimum requirements of the game. You have to have a 32MB video adaptor to run this game. If you don't, upgrade your hardware as minimum requirements mean what they say.



Asheron's Call 2 - but will it work on your miserable machine?



Flying above the green fields of Europe, all alone. Let's fix that

NO MULTIPLAYER

Q I'm playing Combat Flight Simulator 3: Battle for Europe and suddenly my multi-player games are out the door. Literally, I can't see anyone or communicate with anyone. I have a Micron GeForce4 Ti 4600, DirectX 8.2 and 512MB of RAM running Win2K Pro.

Dan

A Well, it seems that Leadtek are up there with MS lately. The WinFast driver installation program incorrectly changes the security attributes for the Windows 2000 "Enum branch" of the Registry, which is critical for driver installation. As a result, attempts to install drivers later are not successful. To fix this almost fatal problem and correct the changes that the installation program made, you have to download and run the pnpreg tool (from MS naturally) at a command prompt, thus: pnpreg -l (I mailed Will back immediately after getting his plea - all is well now. Will's video adaptor is an nVidia GeForce4 Ti 4200 GPU with AGP 8x - it's very cool. His "JBOD" refers to Just a Bunch of Disks that he connects to his Promise RAID controller. He's a network engineer and is presumably still embarrassed).

DIRECTX FAILURE

Q I am using the DirectX Diagnostic Tool (dxdiag.exe), like you've suggested before, to test Direct3D on my PC. I get this: "Direct3D test results: Failure at step 8" in the notes box - huh? Is this a problem? I have a slap bang video card (Parhelia), a P4 2.6, 1 gig of RAM, some SCSI Cheetas etc. (Unfortunately, I am running on WinMe - don't flame me!)

Phellow

A I bet you have LapLink Gold 11 on your PC (he does, I mailed him). Get the latest update for LapLink Gold 11 at www.laplink.com/ (he did, it's fixed, I'm a genius but I wanna play on his system).

BSOD!

Q I am running Win98SE and I'm getting a fatal exception, blue screen on startup. It says "A Fatal Exception 0D has occurred at kfhrrjsosc in VxD APIX(01)". It just started out of the blue (so to speak). The only thing different I have done lately is install a new Lite-On CD writer and Nero Burning ROM which I got for Christmas. Someone told me that I needed aspy 4.7 so I have installed it as well.

Pete Griffin

A Ah ha! This issue may be caused by a damaged apix.vxd file (or a virtual device driver conflict). This file is part of Adaptec's original licenceware for the Win98 ASPI file layer system, ready to go and interface when necessary - read "burning". The original version was 4.00.952 and the Company Name is Microsoft Corporation. A more stable version is 4.60 (1021) with the Company Name of Adaptec. There is no reason for Win9x users to upgrade past 4.60 to the 4.7x series - it's really only for WinXP users (and 64 bit users) who do not want to use the SCSI Passthrough Interface provided by MS. The Win9x /iosubsys/ folder contains many drivers for devices and burning applications. Some 'apix-related' files are the APIX9X.VXD from Adaptec and NeroApix.vxd from ahead software. MS recommends extracting the original file from the Win98 CD but all this does is create undesirable mis-matches between ASPI versions. If you do need an ASPI for dependent programs (ClonyXXL for example) then search for ForceASPI and reload v4.60. You can do all of this in Safe Mode, restart your PC and viola. If you experience any further problems then try <http://club.cdfreaks.com/forumdisplay.php?s=&forumid=59> for expert and friendly help.

UPGRADE ME!

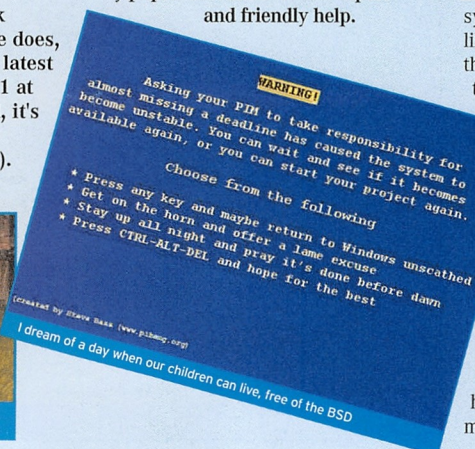
Q My system comprises a GA-8SLML, onboard sound (REALTEK) and graphics (SiS 650GL) up to 64MB, WinXP, 1.7 Celeron. I have no problems with it but now have the upgrading bug. What would be the max size P4 CPU I could use? I was told by my PC vendor I could go to a P4 2.4 but they weren't too sure. Also how much more graphical performance could I expect? It plays RTCW quite nicely @ 800x600 but I just need that little bit more OOMPH. The onboard video is basic but I'm amazed at the job it does. I would like to know your thoughts as the guys at my local computer shop are not into gaming.

Blizzard

A The board's chipset (SiS650) supports a Socket478 Pentium 4 on a 400MHz FSB and PC2100 DDR RAM. Note that it does not support a 533MHz FSB (yet). Theoretically it will support up to 2.60 GHz if Gigabyte provides the BIOS updates but for the life of me, I could not establish the out-of-the-box speeds, nor the maximum speed CPU; it would be a fair guess that 2.4GHz is true enough. The other P4 CPUs in the 400MHz FSB range are 1.40 to 2.50 (GHz) including some "A" versions (1.80A and 2.0A). Of course it also supports any 478 pin Celeron i.e 2.2, 2.1, 2, 1.8 and 1.7. As for graphical performance, depending on how much game logic and geometry computation is passed from the game to the CPU, a game played with the SiS 650GL, in visual terms, may improve noticeably or not at all with a faster CPU. If you're looking for a new video adaptor make sure it can perform Transform and Lighting in hardware. Check out an nVIDIA Ti card because the price is almost right.

LAGGING GAMES

Q When I play games like GTA3, it lags like my old Celeron 300 system... and even when I play games like FIFA2002 it lags. I have updated the BIOS to Award F6, and the driver of the VGA is the latest already since it has no update in the Gigabyte homepage, also the VGA drive is the latest I found in the Gigabyte homepage for SiS645. Is my system too slow to run those games? Or is any component not consistent with others? Since I updated the Award Bios for the SR533 M/B downloaded from the Gigabyte homepage, the system works fine, but the only problem is it keeps having a noise frequently from the motherboard ... it's a "dudd, dudd"



noise, sounds like an error noise, and it keep coming up like every 5 mins, but when I changed the BIOS to F4, it's gone. Do you know what's up?? My system is a Celeron 1.7, Gigabyte SR533, VGA Gigabyte 9000pro 64MB, 256 MB DDR333.

Darren Lai

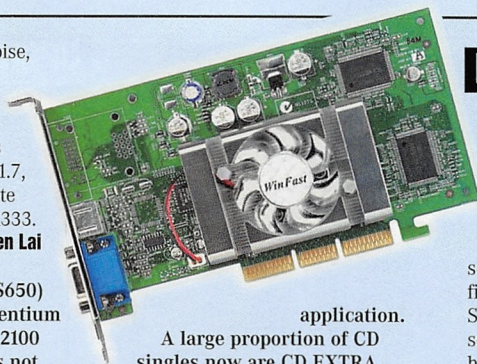
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VIDEOCARD INSTALLATION

Q Err, I just installed my brand-new Leadtek WinFast A280 TD on the system I just built and, err, I can't do a damn thing. I've gone as far as I can but every time I try to do anything (like install my RAID controller) I get a message "access is denied". What's smart enough (or stupid enough) to disable my machine? I have loads of RAM and big disks, a P4 and am running on Win2K Pro. I really need to load in my JBOD.

Will

A Well, it seems that Leadtek are up there with MS lately. The WinFast driver installation program incorrectly changes the security attributes for the Windows 2000 "Enum branch" of the Registry, which is critical for driver installation. As a result, attempts to install drivers later are not successful. To fix this almost fatal problem and correct the changes that the installation program made, you have to download and run the pnpreg tool (from MS naturally) at a command prompt, thus: pnpreg -l (I mailed Will back immediately after getting his plea - all is well now. Will's video adaptor is an nVidia GeForce4 Ti 4200 GPU with AGP 8x - it's very cool. His "JBOD" refers to Just a Bunch of Disks that he connects to his Promise RAID controller. He's a network engineer and is presumably still embarrassed). containing additional data files depending on the



application.

A large proportion of CD singles now are CD EXTRA discs and normally use Apple QuickTime videos plus text and graphic information related to the music on the discs. Phew, good luck!

MECHERROR4

Q Help!!! I am trying to play MechWarrior 4 and I get an error "Error Message: Stop: Failed (Dderr_CannotAttachSurface)". WTF?! My system stops, freezes, locks up, falls over, you name it. I went over to the dark side of Windows 2000 to GET stability! I have an original GeForce MX200, P3-933 and a gig of RAM.

Phil Hadad

A Another gig of RAM at home?! And, jeez, what's this? Gift giving time? Why all the video problems and how come all the Win2K users are coming out of the woodwork? An original MX200, you say... nine words, my friend - Install the Latest Video Driver for Your Video Adapter. The driver for your GeForce is outdated OR the VGA aperture size is set too high in the BIOS. It's hard not to bang on about drivers all the time, but that's often the simple answer (I mailed, he replied, he updated and he reduced the aperture from 128 to 64, he says I'm a genius - I know).



Stamp those bugs to death!



An earlier victim of random freezing

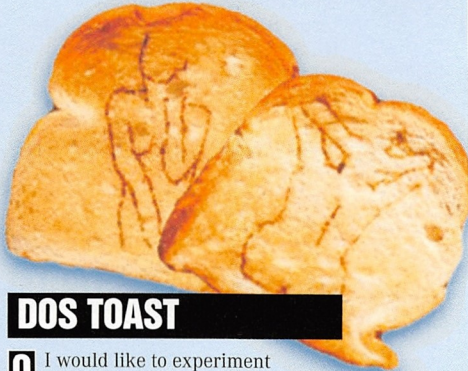
RANDOM FREEZING

Q My problem is that 3D games freeze up in a random fashion. I mean anything running a 3D engine can crash at any point. I can start a game and crash before it even starts. I can repeat this several times before it starts running fine and does so the rest of the day. Switching off hardware-accelerated sound alleviates the problem, however, it also messes up the sound. The Athlon AGP Minidriver is installed, as well as updated drivers. It's worth noting that the machine runs fine in a Windows environment; also, some games are unaffected, Battlefield 1942 for example. Secondly, sometimes when playing Quake 3 Engine derived games (Jedi Outcast and Soldier of Fortune 2) the map is 'invaded' by random artefacts, which cause the game to crash if not playing in God mode. What's the answer?

Nick Hardy

A Nick made the suggestion that it couldn't be heat since it seems unlikely that the heat could grow in the few minutes it sometimes takes. This is true for causes such as dust bunnies the size of small pigs and reduced air flow but a poorly fitted heatsink and fan will let a CPU wind up to arse tearing temperatures in seconds. But it's most likely the sound card that's the problem here. There are two areas to look at: the BIOS and the sound card drivers. The BIOS revisions for the GA-7VRX have some sound fixes such as "Change OnBoard Game Port 200/208 to 201/209 and "To avoid IRQs assigned to both MIDI and LPT" - maybe a clue here, maybe not. As drastic as it sounds, you may need to update the BIOS with 7vrx_f7.zip if the sound driver conflicts are not sorted. I've been to Audigy Hell and back recently so maybe you're in Extigy Hell! If you have not updated the Extigy drivers then get Creative's EXTG-WEBUP-W1-L7 (SBEXTG_WEBUP.exe) which is an update for users running Win98 through to WinXP. There's

no hint in the Revision List that it may fix your problems but it does update the drivers to V5.12.01.0038 and the firmware to V1.1.020507. Make sure that Direct3D is turned on, too; run dxdiag from the start button and look around. The invasion of visual artefacts is video driver related. God-mode cuts a lot of 'visual corners' and I'm not surprised that it circumvents the problems you describe. Different games behave in different ways because of the features employed by the developers and the features available in each GPU. Check out your Direct3D options in dxdiag.exe and upgrade to DirectX 8.1 if necessary.



DOS TOAST

Q I would like to experiment with burning in DOS. I have a multi-boot system with Win98SE on C:\, XP on D:\ and Win2K on E:\. What can I use if anything's available? Are CD-RWs recognised in DOS? How do I do this?

Dave

A This is not simple at all. I dived into DOS burning not long ago and had a lot of fun (and coasters). I especially had fun setting up different DOS environments for different games. Now it's much easier. <http://doscdroast.freeweb.hu/index.html> is the place to be for writing in DOS using DosCDroast Beta 2. After you download the file, Extract it with the WinZip "Use folder names" option. You can restart in MS-DOS Mode, from Windows, change to the installation directory and enter CDCOPY or boot specially into DOS. No ATAPI*.SYS, ASPI*.SYS, MSCDEX.EXE or other drivers are required if you have an IDE/ATAPI writer, so it's easy to use. SCSI devices need their own drivers. On the other hand ... the cool part is to learn about using a DOS Startup Menu for Multiple Configurations if you've never done so. Keywords to search on are "[Menu]" and "menuitem=" as they are the key to controlling Code Groups within CONFIG.SYS. You will also need to configure your AUTOEXEC.BAT in a similar fashion. Remember that floppy that came with your burner and CD-ROM? You'll need the name. SYS file and MSCDEX.EXE (c:/windows/command). Traps for young players where: The burner is enumerated in CONFIG.SYS using "DEVICEHIGH=drivername.SYS /D:MSCD001 /P:220" MSCDEX.EXE on the other hand is loaded in

AUTOEXEC.BAT thus "LH MSCDEX.EXE /D:MSCD001 /L:driveletter /V /M:15" The last line before the corresponding menu blocks in AUTOEXEC.BAT should be GOTO "%CONFIG%". Open up Tweak UI (who doesn't use it?) and choose "Always show boot menu" from the Boot Tab (select a 4 or 5 second wait). Choose Windows 98 from the boot.ini menu on startup, then choose MS-DOS from the next menu and away you go.

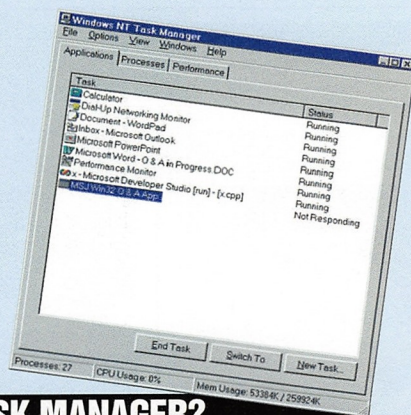
THREE QUESTIONS

Q I have an ASUS A7V KT133, Athlon 900, SB Live!, GeForce4 MX440SE 128Mb DDR (Drivers 41.09 + DirectX 8.1) and 128MB PC133 SDRAM. 1) What's the fastest Athlon chip that I can upgrade to with my board? 2) I recently upgraded my video card from a TNT2 M64 32MB to the MX440SE, now every time I try to run Ghost Recon I get the BSOD saying: "A fatal exception 0D has occurred at 0028:c07e103 in VXD PAGEFILE(01) + 00000023" I was getting this sort of message when one of my RAM sticks died, but this time round it has only started to happen since the new video card was installed. 3) And finally my old man bought a Seagate 80GB HDD for his machine and the BIOS sees it as an 80 but FDISK will only see it as a 10GB drive. We have tried a couple of things but still we can only see that 10GB. If you could tell us what the hell we're doing wrong that would be great.

Chris 'Ox' Ide

A An A7V KT133 Socket A board was originally designed for a 550MHz to 1.3GHz AMD Thunderbird and Duron CPU. BIOS Rev 1009 adds support for the Thoroughbred CPU up to XP 2200+ but the PCB version must be 1.05 or above. Fatal Exception 0D Error Messages are codes that are returned by a program when an illegal instruction has been encountered, invalid data or code is accessed or the privilege level of an operation is invalid. When any of these situations occur, the processor returns an exception to the operating system, which in turn is handled as a fatal exception error message. In many situations, the exception is non-recoverable and you must either restart or shut down the computer, depending on the severity of the error. A Fatal Exception 0D is an error message that is most commonly found, but not limited to, out dated or damaged video adaptor drivers; however, this error message has also been known to occur when the hsflop.pdr file, found in /iosubsys/, is missing or damaged. An invalid page fault may occur when parameters are passed between programs and the OS. An invalid parameter may cause a program to run invalid instructions, which results in an invalid page fault. An invalid instruction can occur when

the virtual memory becomes unstable due to a shortage of RAM, the virtual memory becomes unstable due to a shortage of free disk space, the virtual memory area is damaged by a program or a program attempts to access data that is being modified by another running program. So, go for a spin with MS KB Articles 286180 and 192926. As an immediate precaution, add the following entry to the System.ini file, in its [386Enh] section: [386Enh] ConservativeSwapfileUsage=1 The FDISK issue is well known and don't worry about it. If you have back-issues of PCPP, read my review on the WD 120GB HDD and go for a spin with MS KB Article 263044.



TASK MANAGER?

Q I am running Win2K Pro and lately I haven't been able to bring up Task Manager. I press CTRL+ALT+ESCAPE then I click on Task Manager and when I click on it, it automatically closes. Like it only last on my desktop for a second ... please tell me what to do I really need my Task Manager!

Roger Ramjet

A Hmm, to start Task Manager, you can do any of the following: press CTRL+ALT+DELETE, press CTRL+SHIFT+ESC or right-click an empty area of the taskbar, and then click Task Manager. I'm afraid, very afraid, to reboot into Win2K and try your combination of keys!

WHAT IS BWA?

Q I've heard that SecuROM v4.8x games can be backed up onto CD-R/W but that a bwa file is needed. What's a bwa file because I can't see this option in CloneCD, GameJack or Alcohol 120%. Should I use the MDS or ISO format in Alcohol 120%? My little brother is slowly destroying my game collection so help me!

Steve

A When I become supreme leader of the world, apart from banning large dogs and small noisy animals, it will be compulsory to read back issues of PCPP, if not subscribe. By now, the Editor is trying to pour some of his Life Force back in through his ears after reading the near-fatal trifecta of SecuROM, bwa file and MDS format (It's uncanny how you know me - Ed). Backing up game discs protected by the latest SecuROM is remarkably easy with the right tools. Only Blindwrite can defeat SecuROM and backup to CD at this stage so forget CloneCD and SecuROM v4.8x. Alcohol 120% can emulate SecuROM 4.8x but not write it. While the others are blacklisted at every turn, Blindwrite remains unscathed by the protectionist dark forces. Visit www.cdfreaks.com for detailed help on this subject.



CONSIDER THIS
A WARNING,
NEXT TIME, THE HEAD
WILL STILL BE
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(He's on the edge)

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When RPG's attack.... While "ferreting" out information I came across something precious. I'm talking real-life RPGers who tramp around in muddy terrain every weekend enduring armour chafing in unmentionable places - all in the name of gaming. Imagine trying to take a peaceful walk in Centennial Park with the likes of Sir Ferret Badnews guarding his domain. Fresh air, camaraderie, adventure and clothing your mum made out of a curtain - the stuff of legends Boo tells me.



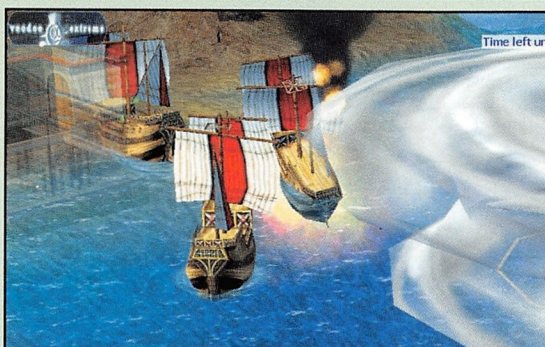
Empire Earth

Q Hi Mr Almighty Oracle. I am having trouble with the level two of the Russian campaign on Empire Earth. Can I have some suggestions and strategies on how to do this level?

Stylian Shane, e-mail

A This is indeed a hellish level but follow my words and the penny will drop for you. Up to now you've probably used offensive tactics but now defence is the key, so stay on your base and get iron and gold. Use your civilisation points to upgrade bomber hitpoints, and cost reduction. Boost speed and attack if you have the points. Build in the following order: airport, Titan bomber, citizens who get more stone, gold and iron, and a strategic defence wall around your base. Start building the wall in the south and create bottlenecks west and northwest, fence in some trees too. Don't worry if you run out of money before finishing it. The Titan bomber should be sent into the air and get the hitpoint and attack upgrades, then send it southeast to bomb the rebel's base.

Keep building that wall. Send one man north to gain control of a water city which will help hold back the alliance forces. Use the gladiator tanks, and Thor AT guns for defence. Make two more Titan bombers and send them west to attack Ukraine's capital, both upgraded if you can afford it. After that, build cybers - Zeus or Ares - to replace the gladiator tanks. Always have one Titan bomber in your airport at all time. Whenever you're attacked, nuke the enemy before they get past your bottlenecks. When food gets low make a farm in a protected corner. Wood can be obtained from the north -



Dominate the world in this flawed classic

put AA guns up there for defence. When you've got 4 Titan bombers send them north to attack either base. With speed and hitpoints upgraded you should be able to get through. Bomb either capital and you win.

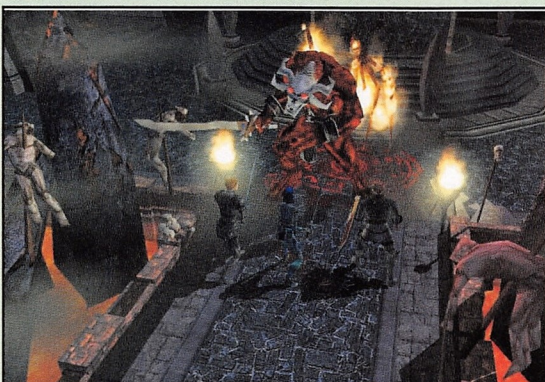
Neverwinter Nights

Q Chapter 1. Temple of Tyr
Quest: Lord Never's Tomb
I am having a problem with a quest called the temple of Tyr. Briley tells you to retrieve a letter from a chest that is right beside him, but when I look in the chest there is nothing in there. Could I have misplaced it earlier in the game? What should I do now?

Rory M, SA, e-mail

A Did you trigger the quest correctly? This is

what should happen and if you can't make it work, then ignore this side quest - or else start the game again - it's only Chapter 1. Oleff in the Halls of Justice, gives you the quest to find Lord Never's tomb readily enough if you're a paladin, monk or cleric - otherwise persuade him. Oleff sends you to Briley in the Peninsula district, ask him about Oleff's letter and the excavations and when directed to open the chest there should be a logbook and three ceremonial items. The hunt for the other 3 tombs depends on other quests to give you access to part of Neverwinter City. Each tomb is unlocked by putting a different ceremonial item in the nearby chest. The 2nd tomb is found in the aqueducts under the Silver Sails



Someone go get the Oracle...

CODE

BloodRayne

Go to the options screen and then to the cheat function. Enter codes exactly as below. A message will indicate correct code entry
INSANE GIBS MODE GOOD:
Dismemberment
ANGRY XXX INSANE
HOOKER: Fill Bloodlust
DONT FART ON SCAR:
Enemies Freeze
TRIASSASSIN DONT DIE:
Invincible
JUGGY DANCES SQUAD:
Juggy Mode
LAME YANKEE DONT FEED:
Top Off Health
SHOW ME MY WEAPONS:
Show Weapons
NAKED NASTY DISH
WASHER DANCE:
Time Factor



Hearts of Iron

Press [F12] and type the following code in the console:
coal: gives coal
steel: gives steel
rubber: gives rubber
oil: gives oil
supplies: increases supplies
manpower: increases manpower
nuke: gives nukes
di: gives you 500 diplomatic influence
war: sets war entry level to 100% (can DoW)
handsoff: the game will not auto-pause on events
event 1013: gives extra industrial capacity in a random province that you own

Battlefield 1942



Press tilda key [~] during game play in single player mode and type one of the following codes:
aiCheats.code
Tobias.Karlsson:
Invincibility1
aiCheats.code
Jonathan.Gustavsson:
Kill enemy bots
aiCheats.code
Thomas.Skoldenborg:
Kill bots
aiCheats.code
BotsCanCheatToo:
Bots cheat
aiCheats.code
TheAllSeeingEyeOfTheAIProgrammer:
Toggle AI statistics
aiCheats.code
WalkingIsWayTooTiresome :
New spawn location



Pharaoh's Ascent

Enter one of the following codes while in a room to activate the cheat:
firewalker: gives coal
givemehelp: gives coal
helpmeplenty: gives coal
youdoit: gives coal
shazam: gives coal

Trading Company in the Docks district and needs the sword to unlock it. The 3rd tomb is in the Great Graveyard in Beggar's Nest and needs a tower shield to unlock the crypt. The final tomb is in the SW quadrant of the Blacklake District. Talk to a little girl, then go inside the house and talk to Telma to reveal the password that opens a secret passage. Use the arrow in the chest to unlock the last tomb and be ready for invisible enemies. You may sell what you pick up to Oleff or Giles in the Moonstone Mask who'll give you more money at the expense of faction (negative). But get a quill off Giles and sell it to Oleff, for positive faction.

CODE

Rallisport Challenge

Unlock these cars by either winning first place in the following races or getting a certain total of points:

Citroen Xsara Kit Car: Mediterranean Rally
Ford RS 200: all Rallicross Internacional races
Nissan Micra: Pro Rally Cup
Renault 5 Turbo: all Ice Racing International Circuit races
Saab 9-3 Viggen: all Koenig Unlimited races
Audi Quattro SI Hill Climb: 70,000 points
Audi Quattro SI: 40,000 points
Citroen Xsara Rallycross: 12,000 points
Ford Focus Rallycross: 12,000 points
Lancia Delta Integrale: 12,000 points
Lancia Delta S4: 40,000 points
Metro ER4: 40,000 points
Mitsubishi Lancer EVO 65: 12,000 points
Nissan Skyline: 12,000 points
Opel Astra T16 4x4: 12,000 points
Peugeot 205 T16: 40,000 points
Peugeot 405 T16 Hill Climb: 70,000 points
Saab 9-3 T16 4x4: 12,000 points
Subaru Impreza Hill Climb: 12,000 points
Suzuki Grand Vitara PP Special: 70,000 points
Toyota Tacoma Hill Climb: 70,000 points
Hill Climb courses as downhill race tracks: 100,000 points



Ramming works!

ACHTUNG!

Remember to take regular breaks when gaming or this could happen to you - www.the-cemetery.demon.co.uk/mortuary.html



Warcraft III

Q Dear Oracle, please help me 'coz I'm up to the first mission of the Undead campaign and I can't find the last acolyte. Please give me the location of the last acolyte. And in James Bond 007: Nightfire I'm up to where you have to save the president from the terrorists, but where is the president? And finally Hitman 2 in this game I'm up to where you have to kill the assassin but where is he? Oh and can you give me a free subscription for your mag? And Deus Ex I can't get past the first stage please tell me how. Thanx Oracle - ya da best.

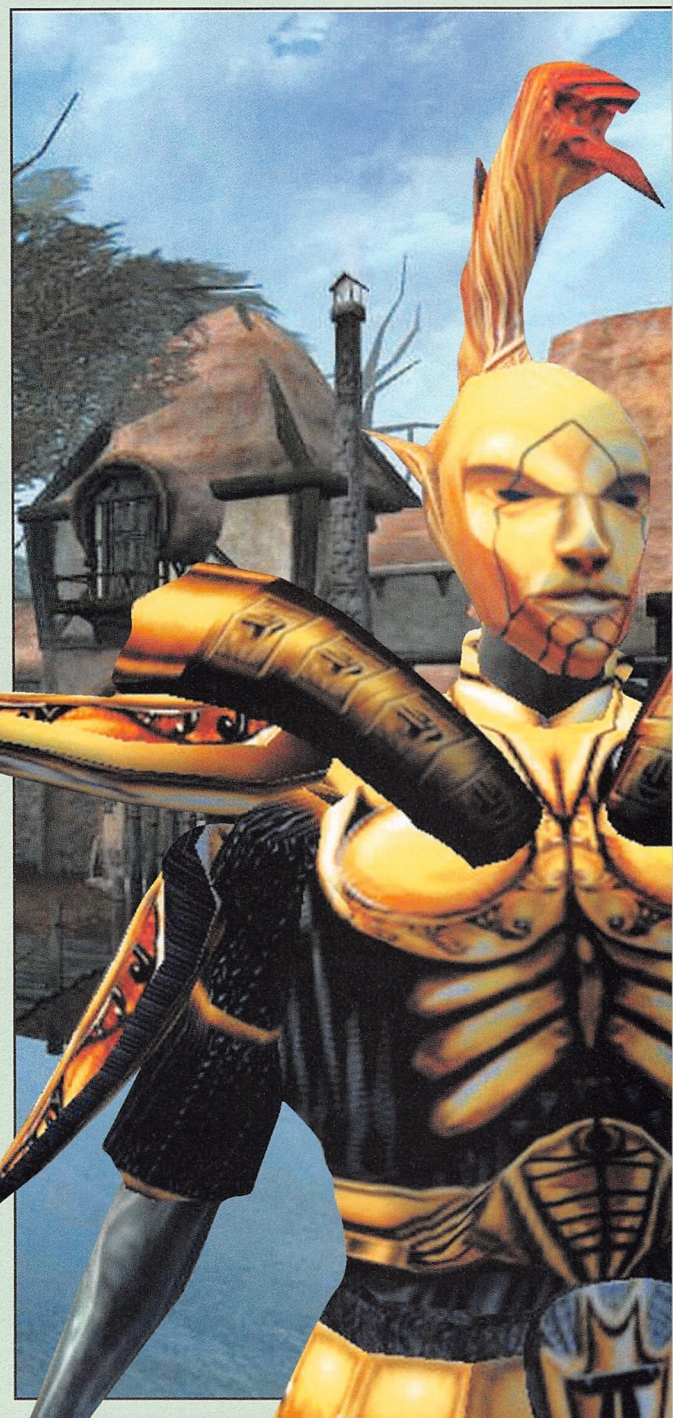
River, e-mail

A Whoa, slow down. If I answered all those questions no one else would get a look in, so let's just deal with your missing Acolyte. Starting south east on the map, go south along the path and enter the town. All acolytes are in red, it shouldn't be that difficult to find all 20. Number 1 is on the path. 2 is in the middle of the town, near the woodchopper. Head southwest and 3 is near some houses. Go south across the river; at the crossroads, head into a clearing, number 4 is fishing. Go south to a house in the middle of the woods where villagers are felling trees for number 5. Travel back down to the bottom left hand corner of the small outpost, deal with 2 villagers and find the 6th Acolyte. Now go north, ready for 4 guards at the gates. Head into town and the 7th is on

your left. Go straight ahead and to the left in a group of houses is the 8th. Over on the right, near a bar is number 9 hiding between the houses. Ahead, you'll see a gate, but bypass it and take the path on the left. You'll come across another keep and some bandits entering it. The 10th Acolyte is in the bottom left corner.

Return to the centre and go left. You'll find two paths, number 11 is on the bottom path and the 12th is on the top path, but be ready for an assassin. Return to the town's centre and into the field. Number 13 is near the houses. Go through the gate, near it at some houses is Number 14. Move up to the top of the town, where there is a small paddock with some sheep. Number 15 is playing shepherd. On the far right near some houses is Acolyte 16. At the bottom of the town is number 17. The rest of the Acolytes are at the far right of the town, but they're being guarded by a Captain and several footmen, with some knights in the area. You'll have to storm this area to get to the last ones.

To become Archmaster return Miner Arobar's abducted daughter to him, and fight Bolvyn Venim in a duel
[The Elder Scrolls, Morrowind 3]



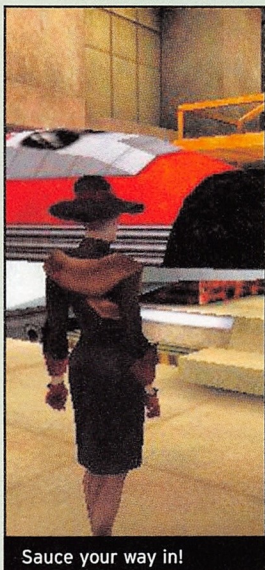
Basically no matter how good you are, the Koreans will always beat you

No One Lives Forever

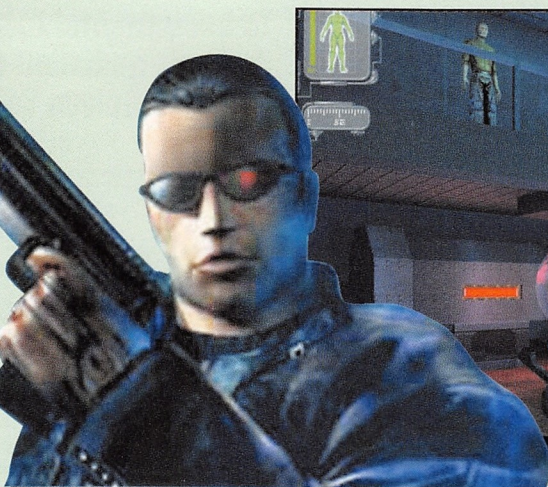
Q I am stuck on The Indomitable Cate Archer: scene 3. Could you PLEASE help me? I have ridden down the elevator and killed the guards in the area and gotten into the building successfully but I always come to a room that I cannot bypass, if I walk into the room, both doors shut and poison gas floods the room which soon kills me. I have repeated this many times and cannot find a way to finish this level or proceed in any way without trying to go through the room.

Paul Smith, e-mail

A Before you go into that fatal room, get some armour first. Walk up a yellow walkway until you come to a grey door. Go through it and left into an office, then down a ladder. In a locker is the armour. When you enter the poison gas room, switch to belt buckle. Then when the gas starts filling the room, use the buckle in the hooks above you in the ceiling. Hoist yourself over the grey door and down the ladder. A lever on the right side of the console turns off the gas. Go out the door down the hall to the left and all the way around. Go past a rock, a stairwell on the left and make your way upstairs to where a scientist is. Press the red button on the console. Return down the walkway and downstairs and wait for the antidote. Open up the glass hatch with the keypad and cure yourself. End this level by returning to the stairs along the long hallway. Go up them to the cargo bay on the left; open the hatch in the floor, then down the hallway.



Sauce your way in!



Watch out for the cage full of Greasels



WTF?



O.R.B

Press [Enter] and type any of the following codes. They are case sensitive.

\$WIN: Win current mission

\$RU <number>: Get indicated amount of resource units

\$SU <number>: Get indicated amount of support units

\$GET TECH: Research only current techs

\$GET ALL TECHS: Research all the techs

\$FOGOWAR ON: Enable fog of war

\$FOGOWAR OFF: Disable fog of war

\$REPAIR ALL: Crash game

\$WEAKEN ENEMY: Lower all current enemy hulls to 1

\$FPS ON: Show frame rate

\$FPS OFF: Hide frame rate

\$GOD ON: God mode for selected unit

\$GOD OFF: Disable God mode for selected unit

\$RESEARCH X <number>: Set research speed

\$BUILD X <number>: Set build speed

\$RESEARCH X <number>: Win current mission

\$COLLISIONS ON: Enable asteroid collisions

\$COLLISIONS OFF: Disable asteroid collisions

\$COLLISIONS ON: Enable asteroid collisions

\$COLLISIONS OFF: Disable asteroid collisions

\$COLLISIONS ON: Enable asteroid collisions

\$COLLISIONS OFF: Disable asteroid collisions

\$COLLISIONS ON: Enable asteroid collisions

\$COLLISIONS OFF: Disable asteroid collisions

Deus Ex MJ12 Facility - Part 4 of UNATCO

Q Paul survived because I helped him kill the MiB and UNATCO guards who raided his apartment, after this I was thrown into a cell at the MJ12 facility (Level 4 of UNATCO). I escaped fairly easily but I couldn't find all my old stuff and I couldn't find the computers that Paul told me about. Other than my little hacker buddy and the medical dude, is there anyone else who will assist me? And other than Anna, whom else do I need to dispose of?

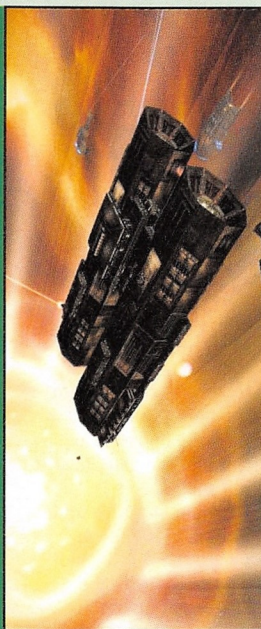
Worms, e-mail

A Worms. Last name Combatrim I presume? Well, no big tough guy with a gun comes to help you in this level - you're on your own so better get a wriggle on. Well, after you talked to Paul in the MedLab return to the Nanotech Lab and go upstairs via the second entrance on your left - guard here. Use tranquiliser dart on the MiB, hiding by one of the grate openings until he's unconscious the take his key and search his office. Read the datacube in the filing cabinet for the login/password. Disable the stasis field on the augmentation canister and read email to find the armoury code. Exit lab, go left to the Command Centre. There are 3 guards patrolling outside, 1 inside and 2 dogs opposite. Deal with them all and enter and pick up your stuff. The PSherman login disables cameras at the security terminal. Return to the Detention Centre. Go to the Robot Maintenance area. When you hear a hissing pipe noise, stop and look behind the pipe for lockpick and crowbar. Go up the stairs in the left of the maintenance

area. Two thirds up to the second landing stop and wait for a sniper to walk by, crouch and kill him and drag his body back to your hiding area. Creep to the hallway on the west side. Wait for the guard and kill him quietly. Head down the hall and upstairs - 2 guards here in the offices. Another hissing pipe in this area means hidden lockpick. Search 3rd floor offices, the PSherman log in the security terminal allows you to reprogram one of the security bots. Either kill the guard on the ground floor or put the bot onto him. Check all the crates.

Now go south to the Armoury. Run behind military bots, they only fire if they see you. Enter the Armoury, turn west, follow a bot and as you turn south look right for a ladder. Pick the panel at the top of the ladder. The valve shuts off the poisonous gas from a nearby pipe. Crawl across the pipe to the catwalk. Turn right, follow it until you're on the 2nd floor of the Armoury and can take out the soldier below. Inside the Armoury go upstairs, log on and turn off the cameras and military bots. Pick up everything you want to get, including what's on the top of the shelves. There's a plasma rifle on the 2nd floor and you'll have to either hack the pc on the first floor for the code or bypass the stasis field with a multitool. Now go to the Command Centre, use the code to open the exit on the west side. Subdue the guard and escape.

Act like you're visiting HQ. In Computer Ops, check the floorboards. Talk to Manderley but watch your back when you leave his office. Or, kill him first before talking. Both Manderley and Gunther's computers contain the phrases needed to kill Navarre. Go down to level 1, run past the 2 guards. Check the SATCOM bunker for items and hop aboard the helicopter for your next mission.



Zoo Tycoon: Marina Mania

Animal Toys

Re-name a guest Lou Catanzaro. This will make all animal toys available.

Double Donations

Name a guest Microsoft or Bill Gates for double the amount of Donations.

The Elder Scrolls III: Morrowind

Q I am up to the Redoran Quest for Garisa Llethri and I have to win his support in the council by finding corruption in the Caldera mines. I have found the Secret book from the council hall and freed all the slaves including Dahleena and even tried killing Cinius Peleliu and Ordral Heldri but when I go back to Garisa he says the same thing; to find evidence of corruption. Help me I must take over House Redoran.

Death Turkey

A To become Archmaster, you will need your own Stronghold built first so talk to Galsa Gindu in the Redoran Council Hall to get the foundations laid. Before Caldera mines, you should have also cleared Morvayn

Manor of the Corpus Stalkers, returned some tax money to Hlaren Ramoren and looked up his old girlfriend. Are you sure you picked up the right ledger to give to Llethri? The secret ledger is in a locked chest in Ordral Helvi's quarters in Caldera's Governors Hall. Llethri will then want to shut down the mine. As well as freeing the slaves you could kill the mine operators Secunia and Stlennius Vibato before reporting back to Llethri. The final steps to become Archmaster are to return Miner Arobar's abducted daughter to him, and fight Bolvyn Venim in a duel if you haven't already in the Redoran Hortator quest. When duelling Venim, he's vulnerable to ranged attacks. With Venim dead and your stronghold built, House Redoran is yours.



Whatever you do, don't call him ugly

CODE

Robin Hood: Legend of Sherwood

During play, ensure a character is standing and point mouse towards the kneeling icon. Press [F11] to access the console and type any of the following codes:

GOODLUCK: Add cloverleaves to the campaign

CASH: Gives more money

BINGO: Gives all your character 999 ammo

IMMUNITY: Gives your characters invulnerability

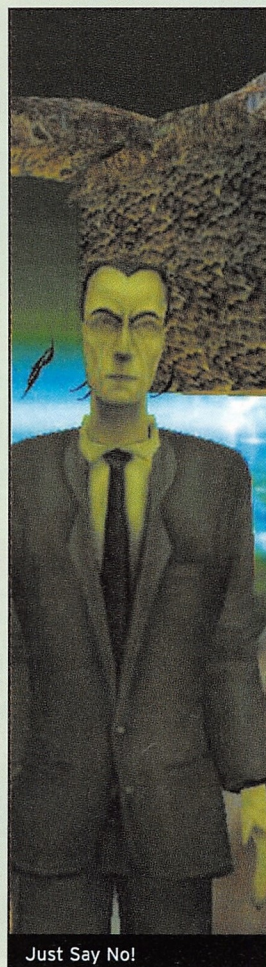
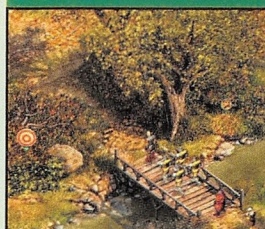
MERRYMAN: Gives you one extra merry man

TIMELESS: Stops time

PAM: Makes all enemies stupid in close combat

UNBLIP: See all characters on the map

WINNER: Win the mission



Just Say No!

CODE

Command and Conquer: Renegade

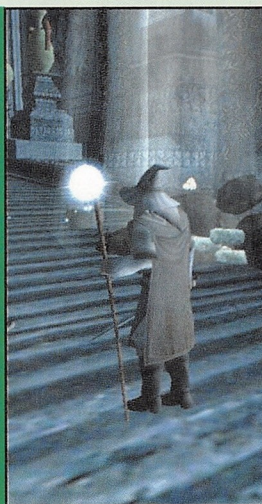
Press ~ during game play to display the console and type any of the following codes:

extras fnkqrrm: Enable extras cheat

allguns: All weapons

Unlimited skirmish mode

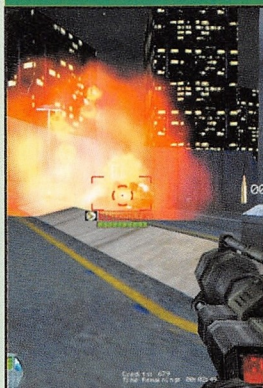
time: Note: As this involves editing a game file, make a backup first. Using a text editor, edit the "svrcfg_skirmish.ini" file in the "westwood\renegade\data" directory. Change the "gametime" value to zero to remove the time limit. It's possible to edit the amount of starting money.



Fellowship of the Ring

Easy money

On the East Road just out of Hobbiton (past the woodsman who trades his dagger for pipeweed), on the ledge above the stumps that summon elves is a house. Enter it and go to the bookcase. Press [Action] and a gold coin will appear. Leave the house, enter again and repeat the action for as many coins as needed.



Half-Life - Unforeseen Consequences Level

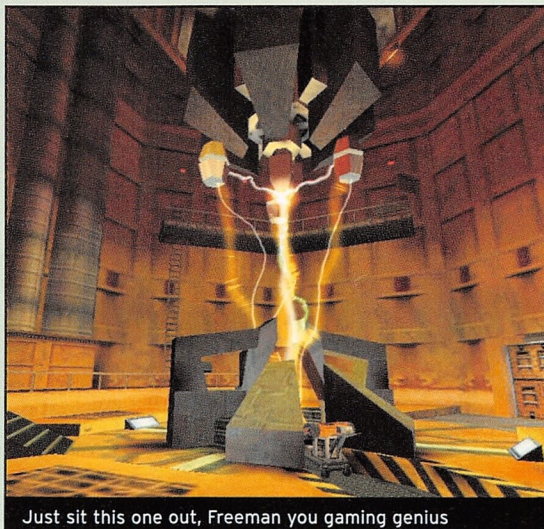
Q I need some help with the fantastic game of Half-Life. It is just after the second dead guard you see, and you pull a huge lever as big as Gordan. The lift starts to move down a diagonal shaft. Lots of those little crabs come at you and I always die. So I need help on how to turn those little crabs into gibbs. Long time dedicated reader (who needs to renew his subscription).

Shadow, email

A Shadow, don't tell me that you need to renew your subscription - DO IT! And now do this to survive The Attack of the Squillion Headcrabs: Save your game before pressing the lever. Catch the lift and go to the point nearest the wall and DUCK. The headcrabs won't see you, thus you won't get turned into their version of a battered crabstick. At the bottom, the lift acts as a bridge keeping you out of the muck (there's a shredder in there). Grab the health from the station, kill the houndeye. Break all the boxes for ammo and go into the corridor, stopping before the bridge. When the bullsquid appears causing the bridge to collapse, use the pipes on the right to get across. Pick up batteries in hall, then head to another area with a broken bridge. Let the bullsquid kill the headcrabs, then kill it. Drop into the muck (health station in the dark corner on the right) follow it to another health station on the other side. Enter the door, go down the shaft until you get to a jumping puzzle. Climb both ladders to the top, then use the hanging crates to get across the abyss. Take the lift to end the level.

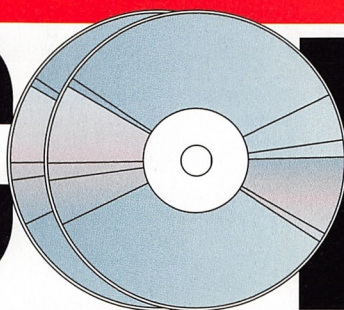


People STILL need help with this thing??



Just sit this one out, Freeman you gaming genius

THE DISC



REQUESTS

We welcome requests so please forward your requests to Disc Producer Paul Noone via email at cdgod@next.com.au or write to PCPP DVD Requests, 78 Renwick St, Redfern NSW 2016



DVD OR CDS NOT WORKING?

PC PowerPlay can only replace discs that are faulty at the time of purchase, not after the fact. Replacement discs cannot be purchased, so please take good care of them. If your disc is damaged or doesn't function as intended then please contact Paul Noone immediately by phone or email - Phone: Sydney 02 9699 0333 Email: cdgod@next.com.au



The flood of fine demos and free games just keeps coming. Once again I had so much this month that I was obliged to leave some of the less worthy games by the wayside. CD1 has the promised second instalment of Red Alert, the Soviets disc, while on the DVD I've also included a whole bunch of great game trailers.

For those who noticed that Raven Shield inadvertently fell off last month's DVD we're pleased to say that we used extra strong glue this issue to keep it in place. Sorry about that.

A few refinements have also been made to the DVD interface thanks to some vocal users on the PCPP Forums. Gone are the now defunct CD1 and CD2 buttons and they've been replaced with a new Demos link, which incorporates all the demos on disc - not least of which are the much anticipated Splinter Cell (also on CD2), Blood Rayne and (average game but great show!) Knight Rider demos. Another big surprise is IGI2. Check it out now.

Still on the DVD, other nice suggestions came in for Mods Plus and the Bunker. Both are absolutely chockers this issue. Massive files include Strike Force 1.80 final, over 1/2 a gig of Counter-Strike files and the America's Army 1.50 update in Patches - so popular that it now has its own section too. And don't forget to get your DirectX 9 update in Utilities.

If you're not a registered forum member then I urge you to sign up now. Head to www.pcpowerplay.com.au/forums. It's free and, most of all, it's where you get to have your say and let us know what you want to see on the DVD and the CDs. I look forward to seeing all your suggestions for PCPP#85!

Paul Noone
Disc Master
cdgod@next.com.au

FREE GAME!

RED ALERT: SOVIET DISC

Yes we admit it, we're terrible teasers giving you the Allied disc first and saving the sweet, sweet Soviet disc for this month. But doesn't it seem so much better now that you've had to wait? It's Funny Stalin Man time! The most jovial genocidal maniac in the history of human depravity! And he has V2 launchers, Mammoth tanks, the Iron Curtain, MiGs and sick flamethrower troops too. Have a quick squiz at the special instructions below to see if they apply to you, and then get into it!

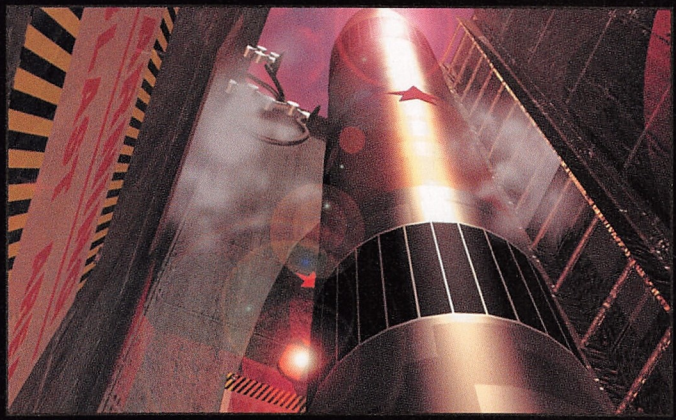
SPECIAL INSTRUCTIONS

Red Alert is a free game that takes up the whole of CD1 and is presented as a .iso image on the DVD. If you are a CD-user you must have CD1 in your drive when you wish to play the game. DVD users must use an .iso mounting program available online.

Red Alert will work fine on all Windows95, Windows98 and WindowsMe machines. Red Alert

may not run on NT4 or Win2000 machines, but this depends on your configuration.

NOTE TO XP USERS: Windows XP is a highly advanced operating system far in advance of what Red Alert was written for. To install Red Alert successfully under Windows XP, you must right-click the autorun.sys file on the CD, select PROPERTIES and run in Windows95 compatibility mode. Unfortunately, this fix is not successful for all XP users, so PC PowerPlay is unable to guarantee that Red Alert will work at all under Windows XP. XP users should only purchase this magazine if they understand that Red Alert may not work for them and that there may not be any fix available. Please visit www.westwood.com for further information.



DVD ONLY!

MORE FREE GAMES!

CodeRED - Battle For Earth

Shoot 'em in the brain!

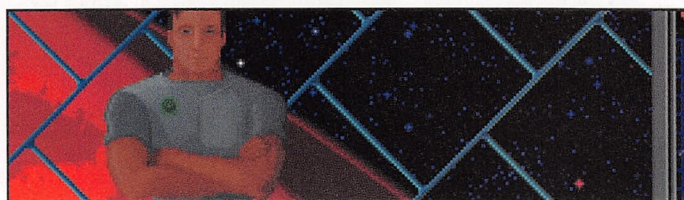
CodeRED - Battle For Earth is a standalone 3D first person shooter crafted from the original source code of Quake II from id Software. And it has kooky 50s sci-fi flavour. And it's like Mars Attacks, that film that had just about everyone in it, including Tom Jones. And it's free.



Ur-Quan Masters

Frunji, the sport of Kings!

Get back into Slave Shield space with this timeless classic. The Umgah, the Yehat (still working on their film script), the loveable and sex-mad Shofixti, the hideous Kor-Ah and the sweet and seductive Syreen. Was this the Golden Age of gaming?



Requires:
P2-300
64MB RAM
8MB Videocard
300MB HDD

Requires:
P-20
64MB RAM
16MB Videocard
200MB HDD

DELTA FORCE: BLACK HAWK DOWN

FUBAR or SNAFU? Only you can decide

Fight through various compelling missions, each with multiple objectives. Engage in urban Close Quarter Battles and long-range sniper fire. Fire heavy weapons mounted in Black Hawk helicopters and on Military Vehicles. This is the singleplayer version of the title that replays the events of Somalia in 1993. Play through a mission of hostage rescue through the dangerous streets of Somalia.



Requires:
P3-500
192MB RAM
32MB Videocard
400MB HDD

IGI 2: COVERT STRIKE

As the Bishop said to the Nun?

Project IGI 2 does play a whole lot better than the original game, while still retaining some of the great aspects of the original, like the huge outdoor maps that are perfect for some fierce multiplayer duels. This singleplayer demo mission is set in a goldmine in the Carpathian foothills of Romania and sees David Jones, our Institute for Geotactical Intelligence (I thought it stood for I'm Going In? - Ed) agent, investigating the theft of an advanced nanotech device by an organised crime syndicate.

Requires:
P3-600
128MB RAM
32MB Videocard
350MB HDD



SPLINTER CELL

Save the world in techno-tights!

Splinter Cell will grant players access to the highest echelons of national security, where shadowy operatives have the freedom to do whatever it takes to safeguard America. In Splinter Cell, the player controls Sam Fisher, a field operative of a secretive "black-ops" NSA sub-agency called Third Echelon. Sam Fisher is geared up to infiltrate high-security strongholds, seize critical intelligence, destroy threatening data and neutralise the enemy - all without leaving a trace.

Requires:
P3-800
256MB RAM
32MB Videocard
250MB HDD

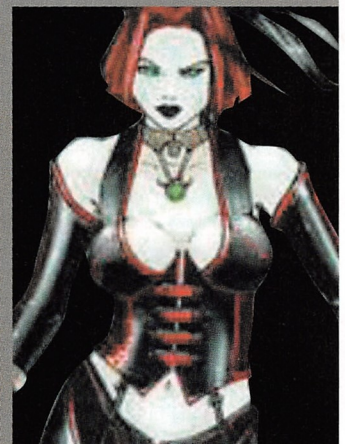


DVD ONLY! BLOODRAYNE

Set in the mid-1930's, BloodRayne introduces the sexy, supernatural Agent BloodRayne. An unholy union of human and vampire, Agent BloodRayne was raised and trained by a secret governmental agency to hunt down and eliminate global evil forces. Now she must take on an occult faction of pre-Nazis and their army of vile, unearthly ghouls to prevent them from unleashing creatures of unfathomable terror onto the world. Kill every single person you see in this one level demo.

Keep those thighs away from me

Requires:
P3-600
128MB RAM
32MB Videocard
300MB HDD

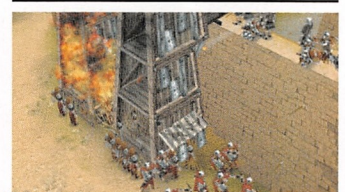


PRAETORIANS

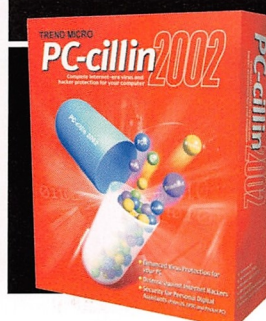
I love a man in greaves

Praetorians is an epic 3D troop based strategy game set amid the political machinations of an emerging Roman Empire. Played out in jaw-dropping 3D visuals, from the immense scale of the Pyramids right down to the individual centurion, Praetorians is stunning in its detail, scale and beauty. The game is also incredibly intuitive, yet it has a sophisticated game engine and allows skilled strategy gamers and beginners alike to fully immerse themselves in the story with absolute ease.

Requires:
P3-800
256MB RAM
32MB Videocard
200MB HDD



DISC VIRUS SCANNING



All files on CD PowerPlay and DVD PowerPlay are scanned with PC-Cillin 2002. For more information please visit: www.manac.com.au/VirusCheck



Yellow Boots

SALON SURVIVOR 3D

What's worse than getting your hair cut?

One thing I've probably never explained about my crazy ex-third flatmate, probably because it's kind of horrible, is that he has, to the best of my knowledge, never cut his hair.

It was while I was watching him engage in the monthly undertaking that was a wash-and-condition, and he was dangling his tresses over the balcony rail in my new, no-longer-in-the-basement flat in an exciting and up and coming inner-city suburb that my agent assured me would stop being a slum ANY DAY NOW, it was while I was watching my crazy ex-third flatmate dangle his hair in the sun to dry that it occurred to me to wonder why there had never been a hairdressing game, and whether or not someone might be developing one now.

Deftly springing into action I fired up my PC and waited six hours for Telstra's ADSL service to start working again. Then I contacted my spies in a hundred tiny Australian game development companies, sifted through six hundred pages of wild rumour and cruel scuttlebutt and eventually came up with a name.

Hair Apparent was the developer, and no surprises here, Blink Drunk was the publisher. I rang William Liability, engaged in blokey swearing, shouting and discussion of his secretary's breasts (made no less painful by the fact he didn't have a secretary) and eventually extracted an address.

Then I rang the so-called 'real life' staffers of PCPP and engaged in a series of protracted and confusing explanations for why I wanted to do a piece on Hair Apparent and their Unisex Salon Simulator, while the editor grunted in unenthused reply. Eventually I got what we call "the green light" and forced my crazy ex-third flatmate to drive me what felt like halfway across the country to a little town called Deniliquin, on the NSW border. They grow rice there. And they have red-gums.

Hair Apparent has - or rather had - a development studio on an upper level of a small arcade that seemed full of nothing but hair salons and a small shop that fronted as Bob's Bargain (singular) but sold a surprisingly large variety of marijuana administering equipment. Naturally, I left my crazy ex-third flatmate to take up with the jovial proprietor, while I went

next door to interview the team.

I was, it turned out, expected. No sooner had the boots stepped onto the attractively puce linoleum of the salon, then I was whisked off my feet, inserted into a frightening porcelain contraption, and had my hair forcibly washed. During this, a strange woman bent my head back at a stupid angle so I could best appreciate the faded posters of Jason Donovan stuck inexplicably to the ceiling. Suddenly three other women appeared overhead.

"We're Hair Apparent," they explained. I assume they all had separate names but in the whole time I knew them (up until the point the smoke overcame us all) they operated as a kind of modern hairdressing equivalent of the Fates. They only had one alpha-build of the game between them, on CD, and they'd pass this back and forward as they spoke, like the Fates with their single eye. Likewise like the Fates, they all carried scissors, but whether to cut short the thread of a man's life or merely cut his hair, I couldn't say.

What I could do was ask about the game.

"Oh it's tremendously exciting," said the dumb one with the big perm, "we noticed a unfilled niche in gaming, so we got some money from the Victorian Government, since they think this town is part of their state anyway, and we went to work on building a alpha of our game, Salon Survivor 3D."

"My nephew knows C++," said the big one with the dumb perm.

The small wiry one with the frightening eyebrows who looked like she'd stuck her fork in the toaster and then fallen headfirst into a vat of equal parts industrial bleach and fake tan, clicked irritably for the CD.

"We believe it offers a unique take on the hairdressing genre," she said eventually, "because we combine fabulous styles, simple hair-care remedies you can do at home, celebrity makeovers, and a sixty-point body impact damage model."

I tried to nod, but at that point I was hauled out of the hair wash basin, stuffed into a chair, jacked up into the sky and set about by at least six apprentices who all began to streak my hair a variety of bold and conflicting colours, not the least of which was green.

"Players will be able to select from a number of styles to inflict on... sorry offer their customers," the first creature went on, "from the simple blow wave to something more exciting, like what Trish has here." She indicated the third harpy, the toaster-fork one.

I asked about the overall gameplay dynamic, as was my wont.

"It's part tycoon game," one of them, it hardly matters which now, replied, "in the sense that you must build up your business through careful investment in Vidal Sassoon products, part sim-city builder type game as you can add in modules to your salon like a manicurist's table or massage or a hairwash like Tanya gave you before, and finally it's part arena deathmatch, when you have to go into the Halls of Blood and defend your father's honour."

I wondered if I'd missed something here.

"No I don't think so," replied the big one with the dumb perm, "I think Salon Survivor 3D pretty much accurately represents the life of the average hair stylist."

"Unisex," Trish added.

"Quite right Trish, Unisex. We don't go in for the automatic weapons those Boutique people use."

And what about Barbers? I found myself wondering.

"We want to keep to the central theme of hairdressing," the first one said sternly, "and not wander off the track into animal husbandry."

"Now we'll just let this perm set," said Tanya from behind. At this stage I still hadn't seen her and as fate would have it I never would, for at that moment the dope depository next door exploded, peppering the salon with tiny pieces of porcelain skulls and dragons curled into the shape of pipes, fake Mercedes car badges and shredded posters of scantily-clad women straddling improbably large motorcycles. A billowing cloud of slightly green smoke followed, and out of this apocalypse staggered my crazy ex-third flatmate, still holding a melted cigarette lighter to the side of the biggest, blackest, most excessively chromed Harley-Davidson-themed bong I had ever seen.

"Man!" he exclaimed, "I'll take it!"



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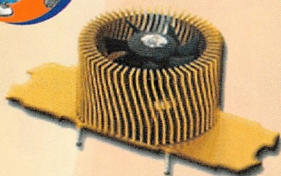
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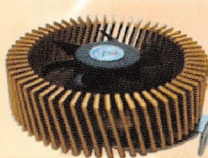
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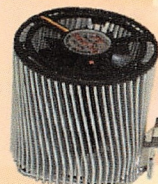
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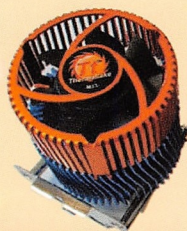
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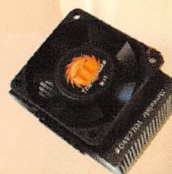


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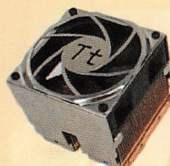
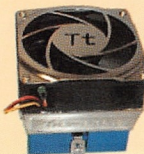
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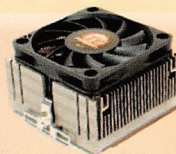
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SMART CASE FAN

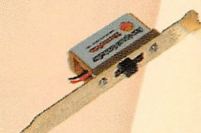
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